

Portland State University PDXScholar

School District Enrollment Forecast Reports

Population Research Center

6-1-2011

North Clackamas School District Enrollment Forecasts, 2011-12 to 2020-21

Portland State University. Population Research Center

Charles Rynerson

Portland State University, rynerson@pdx.edu

Vivian Siu

Portland State University

David West

Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: <http://pdxscholar.library.pdx.edu/enrollmentforecasts>



Part of the [Urban Studies and Planning Commons](#)

Recommended Citation

Portland State University. Population Research Center; Rynerson, Charles; Siu, Vivian; and West, David, "North Clackamas School District Enrollment Forecasts, 2011-12 to 2020-21" (2011). *School District Enrollment Forecast Reports*. Paper 52.

<http://pdxscholar.library.pdx.edu/enrollmentforecasts/52>

This Technical Report is brought to you for free and open access. It has been accepted for inclusion in School District Enrollment Forecast Reports by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

**NORTH CLACKAMAS SCHOOL DISTRICT
ENROLLMENT FORECASTS
2011-12 TO 2020-21**



Portland State
UNIVERSITY

Population Research
Center



JUNE, 2011

**NORTH CLACKAMAS SCHOOL DISTRICT
ENROLLMENT FORECASTS
2011-12 TO 2020-21**

**Prepared By
Population Research Center
Portland State University**

*Charles Rynerson, principal investigator
Vivian Siu
Dave West*

JUNE, 2011

CONTENTS

EXECUTIVE SUMMARY	1
District-wide Enrollment Forecasts	2
Individual School Forecasts.....	3
Students per Housing Unit.....	4
Forecast Error and Uncertainty	4
INTRODUCTION	5
POPULATION AND HOUSING TRENDS, 1990 to 2010	7
Housing Growth.....	9
ENROLLMENT AND HOUSING.....	13
ENROLLMENT TRENDS.....	17
Private School Enrollment, Home School, and Inter-District Transfers	20
Neighboring Districts.....	22
Enrollment Trends at Individual Schools	23
ENROLLMENT FORECASTS.....	27
District-wide Long-range Forecast Methodology.....	27
Population Forecast.....	28
District-wide Enrollment Forecast.....	32
Individual School Forecasts.....	37
FORECAST ERROR AND UNCERTAINTY.....	41
APPENDIX A: ENROLLMENT AND CAPACITY PROFILES FOR INDIVIDUAL SCHOOLS.....	
APPENDIX B: 2000 AND 2010 CENSUS SUMMARIES.....	

TABLES AND CHARTS

Table 1. Historic and Forecast Enrollment, North Clackamas School District.....	2
Table 2. City and Region Population, 1990, 2000, and 2010.....	7
Table 3. Where NCSD Residents are Employed.....	8
Table 4. Housing Units Authorized by Building Permits	11
Table 5. NCSD, Single Family Homes by Attendance Area	12
Table 6. NCSD Students per Home, Fall 2010, by Housing Type and Grade Level ...	14
Table 7. North Clackamas S.D., Enrollment History, 2000-01 to 2010-11.....	19
Table 8. Home School Students Residing in NCSD.....	21
Table 9. Inter-District Transfers.....	22
Table 10. Selected School Districts, Demographic and Enrollment Highlights	23
Table 11. Enrollment History for Individual Schools, 2005-06 to 2010-11.....	25

TABLES AND CHARTS (continued)

Table 12. Estimated and Forecast Births, NCSD.....	30
Table 13. NCSD Population by Age Group, 1990 to 2020.....	31
Table 14. Average Grade Progression Rates, NCSD, Historic and Forecast.....	34
Table 15. NCSD, Enrollment Forecasts, 2011-12 to 2020-21.....	36
Table 16. Enrollment Forecasts for Individual Schools, 2011-12 to 2020-21.....	39
Table 17. Fall 2010 Enrollment Compared to Previous Forecasts by Grade Level.....	42
Chart 1. NCSD Students per Single Family Home, Fall 2010.....	18
Chart 2. Enrollment by Grade Level, 2000-2001, 2005-06, and 2010-11, NCSD.....	23
Chart 3. NCSD net Migration, 1990 to 2020	29
Chart 4. NCSD Birth Cohorts and Kindergarten Enrollment.....	32

EXECUTIVE SUMMARY

This report presents the results of a demographic study conducted by the Portland State University Population Research Center (PRC). The study includes analysis of population, housing and enrollment trends affecting the North Clackamas School District (NCSD) in recent years and forecasts of district-wide and individual school enrollments for the 2011-12 to 2020-21 school years.

The District enrolled 17,368 students in Fall 2010, a decrease of 210 students (1.2 percent) from Fall 2009. This was the second consecutive year of decline in enrollment following 22 consecutive years of K-12 enrollment growth between 1986-87 and 2008-09. This year, for the first time in at least 20 years, total enrollment in schools east of I-205 did not grow. The Clackamas Feeder System total enrollment was basically unchanged from Fall 2009, with a net loss of 15 students. The Milwaukie and Rex Putnam feeder systems had net enrollment losses of 86 and 72 students respectively. The losses at schools west of I-205 were consistent with long term trends but much smaller than in the previous year, between Fall 2008 and Fall 2009.

Part of the NCSD's enrollment loss is attributable to a decline in the number of out-of-district residents. Based on PRC's geographic assignment of students by residence, the number of out-of-district residents in both district-run and charter schools has fallen in the past three years. Most out-of-district residents attend charter schools, and the net loss of over 100 out-of-district residents attending NCSD charters since 2007-08 has been offset by an increase in NCSD residents attending these schools.

Table 1 contains the North Clackamas School District's recent and forecast enrollments for five year intervals. Following the table are brief highlights of the district-wide and individual school enrollment forecasts.

Table 1
Historic and Forecast Enrollment
North Clackamas School District

	Actual			Forecast	
	2000-01	2005-06	2010-11	2015-16	2020-21
District Total	15,010	17,039	17,368	17,674	18,460
5 year change		2,029 14%	329 2%	306 2%	786 4%
K-5	6,946	7,406	7,381	7,542	8,159
5 year change		460 7%	-25 0%	161 2%	617 8%
6-8	3,608	3,939	4,050	3,990	4,130
5 year change		331 9%	111 3%	-60 -1%	140 4%
9-12	4,393	5,470	5,656	5,861	5,890
5 year change		1,077 25%	186 3%	205 4%	29 0%

Population Research Center, PSU. January 2011.

District-wide Enrollment Forecasts

The forecasts reflect the expectation of modest growth due to net migration, but at generally lower rates than the average of the past decade. Growth rates gradually increase towards the latter half of the forecast period, based on the assumption that regional housing demand will increase and the large supply of developable residential land will once again make the District a magnet for a share of the region's growth.

Total K-12 enrollment is forecast to fall again next year, remain stable in 2012-13, then gradually grow between 2013-14 and 2017-18, while the rate of increase is more rapid in the remaining three years of the forecast horizon. Enrollment in Fall 2020 is 1092 students (six percent) higher than Fall 2010 enrollment. Most of the forecast growth is concentrated at the elementary level, especially in the second half of the forecast horizon. Enrollment at the elementary level, based on the new K-5th configuration adopted for Fall 2011, is forecast to have a five year net gain of 161 students while the ten year net gain for elementary grade enrollment is 778 students. Middle school level enrollment (grades 6-8) is expected to grow very little between 2010-11 and 2020-21. A net loss of 60 students is expected for the first five years of the forecast, but subsequent growth in

middle school level enrollment between 2015-16 and 2020-21 will result in a ten year net gain of 80 students. High school level enrollments are forecast to have a net increase of 234 students in in the next ten years. The gain in high school enrollment is primarily expected between 2010-11 and 2015-16.

Individual School Forecasts

Forecasts for individual schools depict what future enrollments might be if Fall 2011 boundaries, grade configurations, and programs remain unchanged for the forecast horizon. They incorporate the 2011 closures of Clackamas and Campbell Elementary Schools and the corresponding expansion of boundaries at Bilquist, Duncan, Sunnyside, Ardenwald, and Lewelling Elementary Schools, the transfer of a small portion of the former Clackamas Elementary boundary from Rock Creek Middle School and Clackamas High School to Alder Creek Middle School and Rex Putnam High School, and the reassignment of sixth grade from elementary schools to middle schools.

The only significant changes modeled for district-wide schools, other than the reassignment of 6th grade to middle schools, are that Riverside Bilingual School will continue to add a grade each year until it serves grades K-5 in 2013-14, and that El Puente will continue to admit just one new kindergarten class each year, gradually decreasing its enrollment.

The neighborhood schools continue the recent pattern of enrollment gains in the CHS feeder system, show a mild turnaround with modest growth for RPHS feeder system, and continued losses in the MHS feeder system. After the 2011 boundary adjustments take effect, CHS feeder system schools are expected to gain 903 students in the remaining nine years of the forecast, the RPHS feeder system schools are expected to gain 517 students, and the MHS feeder system schools are expected to lose 299 students.

Specific figures may be found in Table 16 of this report and in school profiles in Appendix A.

Students per Housing Unit

In Fall 2010 the average number of NCSD K-12 students per single family home built since 2000 was 0.67, which is within the range of other metro area districts for which PRC has analyzed student generation rates. For newly built row homes, the average was 0.31 NCSD K-12 students, less than half the 0.69 rate for detached homes. The number of students per home is also lower in older single family homes and in apartments, condominiums, and manufactured homes. A summary of student generation rates by grade level for different housing types is in Table 6 on page 14.

Forecast Error and Uncertainty

Three years ago PRC produced forecasts for the NCSD and its schools for the 2008-09 to 2012-13 period. That forecast did predict much slower growth than previous trends would have indicated, but it did not anticipate enrollment losses, and predicted about 300 more students (1.7 percent) than were actually enrolled in 2010-11. A more recent forecast from last year indicated that the forecast K-12 enrollment for 2010-11 would be 71 students (0.4 percent) higher than the actual Fall 2010 enrollment. The forecast errors for the District total and for individual grade levels are presented in Table 17 on page 42.

INTRODUCTION

The North Clackamas School District (NCSD) requested that the Portland State University Population Research Center (PRC) prepare enrollment forecasts for the District and its schools. This study integrates information about NCSD enrollment trends with local area population, housing, and economic trends, and includes forecasts of district-wide enrollment by grade level and total enrollment for individual schools. Information sources include the NCSD, U.S. Census Bureau decennial censuses and 2007-2009 American Community Survey (ACS), birth data from the Oregon Center for Health Statistics, and housing development data from the cities and county.

The District serves the cities of Milwaukie and Johnson City, nearly all of the City of Happy Valley, the western edge of the City of Damascus, a few blocks in the Cities of Gladstone and Portland, and large portions of unincorporated Clackamas County such as Oak Grove and Sunnyside. In the current school year, 63 percent of the District's students reside in the District's unincorporated areas. With the exception of the southern portion of the Duncan Elementary attendance area across the river from the community of Carver, the entire district is within the Urban Growth Boundary.

Following this introduction are sections presenting recent population, housing, and enrollment trends within the District and a summary of the average numbers of students per home for different types of housing. Next are the results of the district-wide enrollment forecasts and individual school forecasts, and a description of the methodology used to produce them. The final section contains a brief discussion of the nature and accuracy of forecasts. Appendix A contains a one page profile for each of the District's schools showing its enrollment history, forecasts, and student capacity, and Appendix B contains a summary of some of the initial data released from the 2010 Census aggregated to the District's boundary and to each of its feeder system areas.

POPULATION AND HOUSING TRENDS, 1990 to 2010

Between 2000 and 2010, total population within the NCSD grew by 15 percent, from 98,149 persons to 113,071. This growth rate was faster than Clackamas County's 11 percent and matched the Portland metropolitan area's 15 percent growth in the decade. Numeric and percentage growth in all of these areas was smaller in the 2000s than in the 1990s. Between 1990 and 2000, total population within the NCSD grew by 27 percent, Clackamas County grew by 21 percent and the Portland metropolitan area grew by 27 percent.

Table 2
City and Region Population, 1990, 2000, and 2010

	1990	2000	2010	Avg. Annual Growth Rate	
				1990-2000	2000-2010
NCSD Total ¹	77,415	98,149	113,071	2.4%	1.4%
City of Milwaukie ²	18,692	20,490	20,291	0.9%	-0.1%
City of Johnson City ²	586	634	566	0.8%	-1.1%
City of Happy Valley ²	1,519	4,519	13,903	11.5%	11.9%
NCSD Portion	1,519	4,519	13,672	11.5%	11.7%
City of Portland	437,319	529,121	583,776	1.9%	1.0%
NCSD Portion ³	383	445	546	1.5%	2.1%
City of Damascus	N/A	N/A	10,539		
NCSD Portion	N/A	N/A	3,643		
City of Gladstone	10,152	11,438	11,497	1.2%	0.1%
NCSD Portion ³	345	353	278	0.2%	-2.4%
NCSD Unincorporated	55,890	71,708	77,718	2.5%	0.8%
Clackamas County	278,850	338,391	375,992	2.0%	1.0%
Portland-Vancouver-Hillsboro MSA ⁴	1,523,741	1,927,881	2,226,009	2.4%	1.4%

1. School District population determined by PSU-PRC based on aggregation of census blocks within the NCSD boundary shapefiles. The 2010 NCSD population published by the Census Bureau is 113,237.

2. The cities of Milwaukie and Johnson City are entirely within NCSD. The City of Happy Valley was entirely within NCSD in 1990 and 2000 but subsequently annexed areas outside of NCSD.

3. The 1990 population of NCSD within Portland and Gladstone is estimated; 1990 census blocks were not delineated by school district boundaries.

4. Portland-Vancouver-Hillsboro MSA consists of Clackamas, Columbia, Multnomah, Washington, Yamhill (OR) and Clark and Skamania (WA) Counties.

Sources: U.S. Census Bureau, 1990, 2000, and 2010 censuses

The District's population living within incorporated cities grew by 24 percent in the 1990s and 32 percent in the 2000s. The city population as a share of the District's total changed very little in the 1990s, from 28 percent in 1990 to 27 percent in 2000. As a result of faster growth in the cities than in unincorporated areas since 2000, city population as a share of the District's total grew from 27 percent in 2000 to 31 percent in 2010. The 1990, 2000, and 2010 populations of NCSD, each of its cities and unincorporated area, the County, and the metropolitan region are shown in Table 2.

Most residents commute outside of the District to work, so population growth in the area depends to a great extent on the strength of the metro area's economy. Recent data show that, among private sector workers residing in the NCSD, 44 percent worked in Multnomah County, including 39 percent within the City of Portland. Another 34 percent worked in Clackamas County, primarily with the District itself (22 percent worked within the District), and 13 percent worked in Washington County. Table 3 reports the number and share of all workers by place of work.¹

Table 3
Where NCSD Residents Are Employed

Job Located Within*	Workers	Share
Clackamas County	15,559	34%
North Clackamas School District	10,342	22%
City of Milwaukie	2,794	6%
Multnomah County	20,422	44%
City of Portland	18,179	39%
Washington County	5,985	13%
Marion County	1,100	2%
All other locations	3,311	7%
Total Primary Jobs	46,377	100%

**Note: Indentation indicates that the area is also included within the area above it. For example, workers in the City of Milwaukie are also counted in the North Clackamas School District. Portions of the City of Portland are outside of Multnomah County, but few jobs are located in those areas.*

Source: US Census Bureau, LED Origin-Destination Data Base (2nd Quarter 2009). Jobs covered by unemployment insurance, generally excluding federal government, agricultural, self-employed and domestic workers. Includes at most one (primary) job per resident.

¹ U.S. Census Bureau, LED Origin-Destination Database (2nd quarter 2009). Commute shed report for residents of NCSD. Includes workers at firms covered by unemployment insurance (excludes most agricultural jobs and self-employed). Report and map created at <http://lehdmapp.did.census.gov/>.

Between 2004 and 2007 Clackamas County added 12,200 jobs, nine percent over the three year period. Growth slowed in early 2008, and in October 2008 the county began to post year-to-year job losses. By 2010, employment had fallen below its 2004 level, mainly due to the loss of 11,000 jobs between 2008 and 2009.²

Due to regional job losses, Clackamas County's unemployment rate rose from 4.6 percent in May 2008, about one percentage point *below* the U.S. rate, to 11.2 percent in May 2009, nearly two percentage points *above* the U.S. rate. The Portland metro area's unemployment rate increase of 6.7 percentage points during that period was the biggest increase among the nation's large metro areas. Typically, when the Portland area's unemployment rate is higher than the U.S. rate, population growth slows as a result of fewer people moving to the region.

Oregon is beginning to show signs of an economic recovery. Seasonally adjusted payroll employment grew by 9,800 in February, Oregon's largest one-month gain since November 1996.³ In Clackamas County,

three industries that were hit especially hard during the recession, construction, manufacturing, and professional and business services, have stabilized. Construction is seeing its best year since 2007. It appears as if the county has hit bottom in single family housing permits. Small gains in manufacturing have pulled employment up to year-ago levels for the first time in nearly two years. And hiring trends in professional and business services returned to a semblance of normalcy.⁴

Housing Growth

During the 1990s, the number of housing units within the District's boundaries increased by about 8,600. The recessionary periods of 2001-2002 and 2008-2009 prevented that level of growth from being repeated in the 2000s. Between 2000 and 2010 the District added about 6,100 homes, for a total of 47,246 housing units reported in the 2010 Census.

² "Current Employment by Industry," Oregon Employment Department, OLMIS. Average annual non-farm employment in Clackamas County was 135,900 in 2004, 148,100 in 2007, and 134,900 in 2010.

³ News Release, Oregon Employment Department, March 15, 2011.

⁴ "Clackamas County: Emerging from the Great Recession" Oregon Employment Department, December 30, 2010.

Previous enrollment forecast reports included details about the location and size of residential developments approved by the City of Happy Valley and by Clackamas County. Because of the extreme slowdown in development in the past few years, these tables are not included in this report. The small number of students that the District may gain from new housing in the short run is likely to be overshadowed by demographic changes in existing homes. Future reports will reassess the housing market's potential to influence short term enrollment trends, and also incorporate long term residential capacity based on Metro's latest buildable lands inventory.

Development approvals peaked this decade in the three years between 2003 and 2005, when plans were approved for about 4,000 subdivision lots or multi-family units. In sharp contrast, only about 600 home sites were approved in the three years from 2007 to 2009, and some of these later proposals were subsequently withdrawn or have expired.

As of late 2010, there were at least 1200 vacant residential lots in platted subdivisions that had been approved within the NCSD between 2003 and 2009. About 300 of the vacant lots were in the Oregon Trail Elementary attendance area and about 400 were in the Scouters Mountain Elementary attendance area. These two areas accounted for the majority of the District's buildable lots in recent subdivisions. Although many of the parcels are currently bank-owned, there is potential for much of the new single family development within the District in the next three to five years will occur on these vacant properties.

Residential building permit activity within Happy Valley and Milwaukie each of the past 15 years is presented in Table 4. The number of permits for single family homes peaked in both cities in 2005. An unprecedented 566 homes were permitted in Happy Valley that year. Homebuilders continued to pull a large number of permits until Summer 2007, after which the number of new permits suddenly plummeted. Only 39 of the 256 permits in 2007 were issued after September. Happy Valley issued fewer permits for new homes in 2009 and 2010 than in any year since 1996.

Table 4
Housing Units Authorized by Building Permits

Year Permit Issued	City of Happy Valley		City of Milwaukie	
	Single Family	Multiple Family	Single Family	Multiple Family
1996	66	0	40	4
1997	153	0	38	24
1998	153	0	35	0
1999	141	0	18	0
2000	87	0	11	0
2001	159	0	11	0
2002	184	0	14	0
2003	224	0	17	0
2004	216	0	41	0
2005	566	0	45	97
2006	388	228	11	0
2007	256	0	18	0
2008	95	0	2	0
2009	70	0	3	0
2010	71	0	3	2
2011 (Jan-Apr)	44	0	0	0

Source: U.S. Census Bureau, Residential Construction Branch. Data available online at <http://censtats.census.gov/bldg/bldgprmt.shtml>. The multiple family figures have been edited to reflect the correct unit totals for North Main (Milwaukie) and Hawk's Ridge (Happy Valley).

Tax assessor data provided by the Clackamas County Geographic Information Systems (GIS) Department — spatially aligned with the District's attendance area boundaries — indicates that about 4,600 new single family housing units were built within the District between 2000 and 2009. Nearly 900 of those were built in the peak year, 2005. Table 5 contains the number of single family homes by attendance area and year built.

Table 5
North Clackamas School District, Single Family Homes by Attendance Area

Elementary Area (2010-11)	Total	Year Built											
		Before 1990	1990 to 1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Clackamas	442	219	203	2	1	3	1	1	2	3	3	4	0
Duncan	1,597	712	296	112	68	11	11	77	85	26	74	100	25
Happy Valley	1,782	521	539	49	104	117	143	142	70	51	39	2	5
Mount Scott	1,736	914	265	34	17	27	22	69	205	42	64	39	38
Oregon Trail	1,450	145	1,000	44	8	21	81	39	52	14	30	11	5
Scouters Mountain	1,226	345	79	17	16	4	3	31	338	271	102	14	6
Spring Mountain	1,814	648	836	33	54	78	34	30	9	50	24	17	1
Sunnyside	1,669	632	696	84	45	24	14	35	28	37	57	14	3
CHS Feeders Total	11,716	4,136	3,914	375	313	285	309	424	789	494	393	201	83
Ardenwald	2,089	1,891	161	2	4	1	7	4	5	4	4	2	4
Campbell	1,708	1,580	93	3	1	5	3	2	4	7	8	0	2
Lewelling	1,221	1,140	47	4	3	3	6	6	7	3	2	0	0
Linwood	1,135	1,104	23	1	2	1	1	0	0	0	3	0	0
Milwaukie	1,379	1,068	246	6	7	3	5	25	3	13	2	1	0
Whitcomb	843	739	40	3	3	3	0	3	13	19	15	4	1
MHS Feeders Total	8,375	7,522	610	19	20	16	22	40	32	46	34	7	7
Bilquist	1,826	1,592	99	30	17	22	5	6	10	34	6	2	3
Concord	1,886	1,515	218	6	9	36	48	18	18	4	11	1	2
Oak Grove	2,239	1,963	134	17	10	7	15	19	19	13	24	12	6
Riverside	1,207	1,092	55	9	1	0	11	13	9	4	8	4	1
View Acres	2,400	1,989	204	36	16	1	5	64	9	12	21	43	0
RPHS Feeders Total	9,558	8,151	710	98	53	66	84	120	65	67	70	62	12
District Total	29,649	19,809	5,234	492	386	367	415	584	886	607	497	270	102

Source: Estimated by attendance area by PSU-PRC from tax assessor information provided by Clackamas County GIS, December 2010. A small undercount may result due to multiple homes on single tax lots.

ENROLLMENT AND HOUSING

For school districts experiencing growth in their housing stock, understanding the existing demographics of the district is not enough. A common concern of community members and school officials is the impact of new residential development on school enrollment. New housing generally contributes enrollment growth to local schools, but the average number of students in each home is often lower than many people anticipate, and demographic trends in existing homes may either offset or exacerbate the enrollment gains from new housing. Also, the impacts vary by the characteristics of the new housing. In this section, we present estimates of student generation for different types of housing in the NCSD. These estimates help to inform the enrollment forecasts, and they can be used by District staff on an *ad hoc* basis to estimate potential student generation from future developments as they are proposed or approved.

We estimated the Fall 2010 number of students per housing unit in a geographic information system (GIS), matching student addresses with tax lots and their associated attributes. Student records contain no personally identifiable data such as names or birth dates, and the information is reported only in aggregate or summary form, such as in the tables in this section. Attribute data from the Clackamas County tax assessor's office provided information including whether each tax lot included a home, the year that the home was built, the type of home, and the lot size. Additional information from Metro allowed us to identify multi-family properties and their unit counts.

For District homes built between 2000 and 2009, the average number of NCSD K-12 students per home was 0.67, about two students in every three homes. The rates are within the range of rates that we have measured for new single family homes in recent studies for other area school districts.⁵ Homes built in the 1990s had about the same number of high school students as newer homes, but fewer elementary and middle school

⁵ For example, 0.68 in the Canby School District, 0.52 in the Tigard-Tualatin School District, and 0.51 in the Oregon City School District in Fall 2010, and 0.84 in the Sherwood School District in Fall 2009.

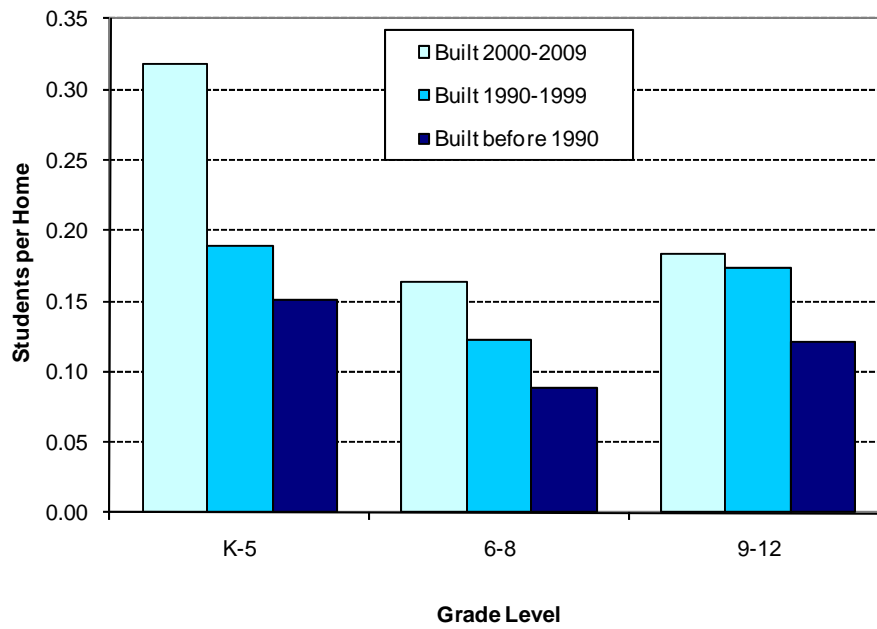
students and a lower K-12 average of 0.49. Homes built before 1990 housed even fewer students on average — 0.36 NCSD K-12 students per home.

Table 6 includes these rates by age of single family home as well as rates for other types of homes. In the most recent decade, a growing number of lots in new subdivisions are designed for attached or nearly attached row homes. A few hundred had been built by 2009, generating fewer than half as many NCSD students per home (0.31) as detached homes built at about the same time (0.69). Among other types of housing, rental apartments had higher student generation rates (0.26) than condominium units (0.08) or manufactured homes (0.19).

Table 6 Average Number of NCSD Students per Home, Fall 2010 By Housing Type and Grade Level				
	Grade Level			
	K-5	6-8	9-12	K-12
Single family homes built 2000-2009	0.32	0.16	0.18	0.67
<i>detached homes built 2000-2009</i>	0.33	0.17	0.19	0.69
<i>row homes built 2000-2009</i>	0.16	0.09	0.06	0.31
Single family homes built 1990-1999	0.19	0.12	0.17	0.49
Single family homes built before 1990	0.15	0.09	0.12	0.36
Condominiums	0.04	0.02	0.02	0.08
Apartments	0.13	0.06	0.07	0.26
Manufactured homes in M.H. Parks	0.09	0.04	0.06	0.19
<i>Source: Data compiled by PSU-PRC, using NCSD student data, geographic shape files from Clackamas County GIS, tax lot attribute data from Clackamas County Assessor's Office, and a multi-family housing inventory from Metro.</i>				

The student generation rates shown in Chart 1 illustrate the “aging in place” that occurs in single family homes. On average, homes that are 10-20 years old have fewer young children than homes that are less than 10 years old. As the older children graduate from high school, the homes built in the 1990s will soon have even fewer K-12 residents, much like the homes built before 1990 that are now more than 20 years old. Although younger families may eventually occupy the older homes, owner-occupied homes turn over to new owners very gradually, and household composition of existing homes tends to be more diverse than the families with children who are well represented among buyers of new tract homes.

Chart 1
NCSD Students per Single Family Home, Fall 2010



ENROLLMENT TRENDS

After 22 consecutive years of enrollment growth between 1986-87 and 2008-09, total K-12 enrollment in the North Clackamas School District fell by 150 students between Fall 2008 and Fall 2009, and an additional 210 students between Fall 2009 and Fall 2010. This year, for the first time in at least 20 years, total enrollment in schools east of I-205 did not grow. The Clackamas Feeder System total enrollment was basically unchanged from Fall 2009, with a net loss of 15 students. The Milwaukie and Rex Putnam feeder systems had net enrollment losses of 86 and 72 students respectively. The losses at schools west of I-205 were consistent with long term trends but much smaller than in the previous year, between Fall 2008 and Fall 2009.

District-wide enrollment is just 329 students greater than five years ago in 2005-06, with most of the growth occurring at charter schools and district-wide schools and programs. This most recent five year growth in is sharp contrast to the previous five years between 2000-01 and 2005-06 when the District added over 2,000 students. Overall enrollment in elementary grades, based on the new K-5th configuration that the District is adopting for 2011-12, was about the same in 2010-11 as in 2005-06. Secondary enrollments at both the middle (6th-8th) and high school (9th-12th) level remained higher than in 2005-06.

Part of the NCSD's enrollment loss is attributable to a decline in the number of out-of-district residents. Based on PRC's geographic assignment of students by residence, the number of out-of-district residents in both district-run and charter schools has fallen in the past three years. Most out-of-district residents attend charter schools, and the net loss of over 100 out-of-district residents attending NCSD charters since 2007-08 has been offset by an increase in NCSD residents attending these schools.

The District has been an attractive destination for families with children already enrolled in school. Between 2000-01 and 2008-09 the District had a net gain of two percent more students, on average, in grades 2-6 each year compared with grades 1-5 the previous year. During that same period the District had a net gain of more than six percent, on average, between 8th and 9th grade. Since much of this growth was driven by new housing, these

gains did not occur in the most recent two years. In both years, enrollment in 2nd-6th grade was nearly identical to the previous year's 1st-5th grade enrollment, and net gains between 8th and 9th grades averaged only two percent. Throughout the decade, even during growth periods there was very little increase in births or primary grades enrollment, so the recent lack of in-migration is compounded by a loss of enrollment momentum. This is illustrated in Chart 2, which shows that there are now several hundred more students in 10th, 11th, and 12th grade than in 1st, 2nd, and 3rd grade.

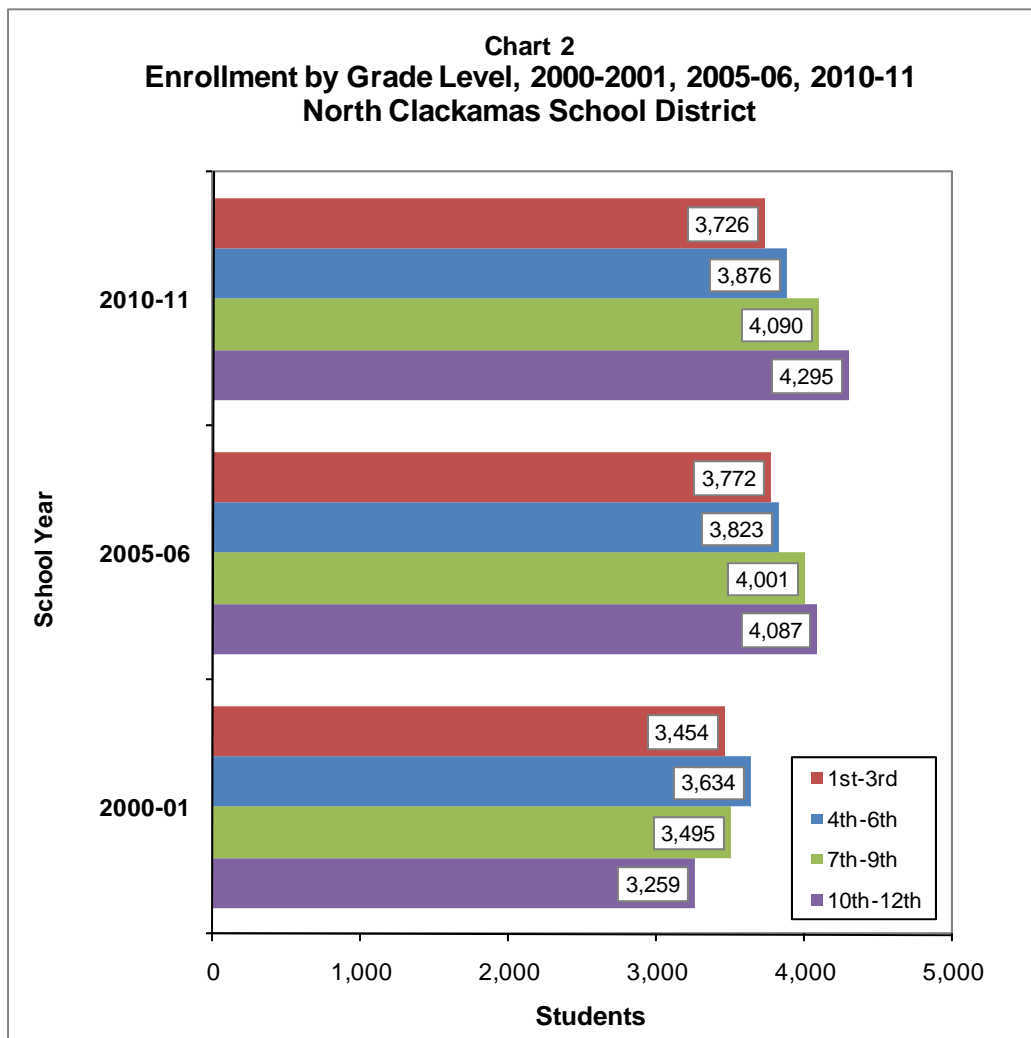


Table 7

North Clackamas School District, Enrollment History, 2000-01 to 2010-11¹

Grade	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
K	1,105	1,051	1,122	1,187	1,086	1,132	1,090	1,112	1,180	1,144	1,100
1	1,165	1,232	1,139	1,218	1,269	1,240	1,263	1,220	1,214	1,246	1,254
2	1,102	1,181	1,239	1,133	1,257	1,272	1,234	1,303	1,255	1,238	1,252
3	1,187	1,160	1,195	1,243	1,169	1,260	1,267	1,255	1,317	1,242	1,220
4	1,157	1,210	1,189	1,225	1,280	1,201	1,285	1,297	1,325	1,303	1,263
5	1,230	1,190	1,248	1,210	1,252	1,301	1,237	1,329	1,323	1,309	1,292
6	1,247	1,262	1,253	1,258	1,228	1,321	1,359	1,277	1,327	1,345	1,321
7	1,232	1,282	1,304	1,276	1,337	1,259	1,348	1,391	1,302	1,351	1,376
8	1,129	1,263	1,339	1,313	1,331	1,359	1,292	1,337	1,420	1,319	1,353
9	1,134	1,150	1,311	1,418	1,447	1,383	1,529	1,399	1,414	1,434	1,361
10	1,134	1,167	1,153	1,293	1,439	1,431	1,442	1,485	1,418	1,424	1,434
11	1,050	1,111	1,186	1,213	1,278	1,362	1,445	1,477	1,521	1,455	1,421
12	1,075	954	993	1,041	1,070	1,294	1,443	1,476	1,491	1,488	1,440
UN²	63	109	141	167	80	224	202	211	221	280	281
Total	15,010	15,322	15,812	16,195	16,523	17,039	17,436	17,569	17,728	17,578	17,368
<i>Annual change</i>		312 2.1%	490 3.2%	383 2.4%	328 2.0%	516 3.1%	397 2.3%	133 0.8%	159 0.9%	-150 -0.8%	-210 -1.2%
K-5	6,946	7,024	7,132	7,216	7,313	7,406	7,376	7,516	7,614	7,482	7,381
6-8	3,608	3,807	3,896	3,847	3,896	3,939	3,999	4,005	4,049	4,015	4,050
9-12	4,393	4,382	4,643	4,965	5,234	5,470	5,859	5,837	5,844	5,801	5,656

	5 Year Change: 2000-01 to 2005-06		5 Year Change: 2005-06 to 2010-11		10 Year Change: 2000-01 to 2010-11	
	Change	Pct.	Change	Pct.	Change	Pct.
K-5	460	7%	-25	0%	435	6%
6-8	331	9%	111	3%	442	12%
9-12	1,077	25%	186	3%	1,263	29%
Total	2,029	14%	329	2%	2,358	16%

1. Includes enrollment at charter schools.

2. "UN" is ungraded special education, not included in K-5, 6-8, and 9-12 totals.

Source: North Clackamas School District, Fall enrollment.

Private School Enrollment, Home School, and Inter-District Transfers

Four major private schools are within the NCSD's boundaries. Christ the King enrolled 215 students in grades K-8 in 2010-11 (down from 249 in 2007-08), St. John the Baptist has maintained enrollment of about 200 students, La Salle High School has enrolled between 600 and 650 students throughout the past decade, and Portland Waldorf School has maintained enrollment of about 350 K-12 students since mid-decade. Just outside of the NCSD boundaries, Rivergate Adventist Elementary School in Gladstone serving about 135 students in grades K-8 is currently raising funds for a building expansion, and Damascus Christian School enrolls about 250 students in grades K-12.

Private schools within the NCSD enroll local students as well as students from beyond the NCSD boundaries; conversely NCSD residents attend private schools beyond the District's boundaries, so the number of students enrolled in private schools physically located within the District can not be used to measure overall private school share. The best estimates of private school enrollment for NCSD residents come from the Census Bureau — the 1990 and 2000 Census "long form" and the more recent ACS. In 1990, about 900 residents in 1st-12th grade were enrolled in private schools, a seven percent share. In the 2000 Census about 1,900 of the K-12 students living in the District were reported as private school students, including 1,600 students in grades 1-12, an 11 percent share of all 1st-12th grade students. The ACS, a much smaller sample with larger margins of error, also estimates that 11 percent of 1st-12th grade NCSD residents attend private schools.⁶

Another difference between public school enrollment and total school age population can be attributed to home schooling. Home schooled students age 7 to 18 living in the District are required to register with the Clackamas Educational Service District (CESD), though the statistics kept by the CESD are not precise because students who move out of the area are not required to drop their registration. Students who enroll in public schools after being registered as home schooled are dropped from the home school registry.

⁶ U.S. Census Bureau, 2000 Census, Summary File 3, Table P36; U.S. Census Bureau 2007-2009 American Community Survey 3 year estimates, Table C14002.

Table 8 shows these data by grade level. Recently (March 2011), there were 647 NCSD residents registered. This total was similar to the 2004-2005 period, but an increase of 200-300 students from the 2000-2001 period. About half of the home school students were of high school ages. In 2011, the current number of registered home school students represented about two percent of the NCSD's resident K-5th grade population, four percent of its 6th-8th grade population, and five percent of its 9th-12th grade population.

<p>Table 8 Home School Students Residing in NCSD¹</p>				
	Grade 1-6	Grade 7-8	Grade 9-12	Total
2007-08 ²	200	111	280	591
2008-09 ³	206	104	333	643
2010-11 ⁴	219	111	317	647

1. Residents of NCSD age 7-18 enrolled with Clackamas Education Service District.
 2. January 17, 2008.
 3. February 2, 2009.
 4. March 1, 2011.
 Source: Clackamas Education Service District

Private schools and home schooling help to explain the difference between the number of school-age children living in the District and the number attending District schools. Both represent “outflow” from the District. That is, children eligible but not attending District schools. The other “outflow” consists of District residents who attend public schools in other school districts. There is also a related “inflow” of residents from other districts.

Under state rules, families must request and be granted an inter-district transfer from their resident district and the transfer must also be approved by the district that they want to attend. Table 9 shows that part of the 2009-10 and 2010-11 enrollment declines can be attributed to a less favorable balance of transfer students. In 2009-10, there was a net enrollment loss of 109 students due to inter-district transfers. In 2010-11, there was a net loss of 136 students. The number of transfers out of the District in 2010-11 was again greater than the number of transfers into the District; the net loss in enrollment due to inter-district transfers can partially explain the decline in district-wide enrollment.

Table 9
Inter-District Transfers

2008-09	K-6	7-8	9-12	Total
Into Oregon City S.D.	77	19	71	167
Out of Oregon City S.D.	137	34	76	247
Net	-60	-15	-5	-80
2009-10				
Into Oregon City S.D.	73	20	83	176
Out of Oregon City S.D.	162	34	89	285
Net	-89	-14	-6	-109
2010-11*				
Into Oregon City S.D.	47	6	44	97
Out of Oregon City S.D.	127	33	73	233
Net	-80	-27	-29	-136

* Note: Incomplete Data for 2010-11

Source: North Clackamas School District

Neighboring Districts

Table 10 displays several facts about NCSD demographic and enrollment trends in comparison to three other nearby Clackamas County school districts. The overall enrollment growth or decline in each district is influenced by housing construction, and also by the district's unique demographics. The portion of the NCSD east of I-205 has been one of the fastest growing parts of the metro area for the past two decades, and the District's enrollment growth has outpaced its neighbors. Gladstone, Canby, and Oregon City have all lost enrollment in the past few years as relatively small classes have entered elementary grades.

Table 10
Selected Clackamas County School Districts
Demographic and Enrollment Highlights, 1990 to 2010

	North Clackamas	Oregon City	Canby	Gladstone
Enrollment growth, 1990-91 to 1995-96	13%	-1%	13%	12%
Enrollment growth, 1995-96 to 2000-01	8%	6%	9%	5%
Enrollment growth, 2000-01 to 2005-06	14%	8%	-1%	-8%
Enrollment growth, 2005-06 to 2010-11	2%	-3%	-7%	-7%
Latino enrollment, 2010-11	15%	11%	26%	14%
Grades 9-12 enrollment, 2010-11	33%	30%	33%	35%
Population growth, 1990 to 2000	26%	24%	18%	15%
Population growth, 2000 to 2010	15%	14%	10%	-2%
Multi-family housing share, 2000	38%	23%	24%	26%
Population under age 18, 1990	23.6%	28.6%	27.0%	26.4%
Population under age 18, 2000	24.4%	26.3%	26.9%	26.0%
Population under age 18, 2010	23.3%	23.8%	24.1%	23.4%
Population rural, 2000	1.0%	16.5%	35.6%	0.0%

Data assembled by Population Research Center, PSU, from several sources: U.S. Census Bureau; Canby S.D.; Oregon City S.D.; North Clackamas S.D.; OR Dept. of Education; U.S. Dept. of Education.

Enrollment Trends at Individual Schools

Because of boundary changes that affected most of the District's elementary schools in 2009, comparing 2010-11 enrollments to historic enrollments at individual schools is difficult. Other changes involve new charter schools and district-wide schools and programs that have attracted some students who might otherwise have enrolled in neighborhood schools. Secondary boundaries were stable over the past five years, except that the Clackamas high area is now served by two neighborhood middle schools. The former Sunrise Middle School area has been split between the Happy Valley and Rock Creek Middle Schools. Elementary boundaries were stable from 2005 to 2009, so trends are evident in the years leading up to the boundary changes.

In the Clackamas High feeder system, elementary schools enrollment gained 303 students (8.6 percent) between 2005-06 and 2010-11 while there was a loss of 13 students (0.3

percent) compared to 2009-10. Three of the eight elementary schools experienced enrollment loss compared to last year. They are: Duncan, with a loss of 24 students; Happy Valley, with a loss of 40 students; and Spring Mountain, with a loss of 22. Enrollment at two other elementary schools, Oregon Trail, and Sunnyside, changed little from the previous year. Three other schools gained enrollment: Clackamas, gaining 22 students; Mount Scott, gaining 27 students; and Scouters Mountain, gaining 33 students. Middle schools gained 75 students (six percent), and CHS experienced a loss of 77 students (three percent) within the past year.

Milwaukie High feeder system elementary enrollment fell by 296 students (10 percent) between 2005-06 and 2010-11 and fell by 51 students (two percent) compared to last year. Compared to their 2009-10 enrollments, all schools in the Milwaukie feeder system experienced decline in enrollment in 2010-11, except for Whitcomb, which gained seven students. Middle and High school remained relatively stable, losing six and 29 students respectively from last year.

Rex Putnam High feeder system elementary enrollment fell by 358 students (15 percent) since 2005-06 and fell by 68 students (three percent) between 2009-10 and 2010-11. All Rex Putnam feeder system elementary schools lost enrollment compared to last year, with the exception of stable enrollments at Concord Elementary. Alder Creek Middle School gained 14 students (two percent) and Rex Putnam High School lost 18 students (one percent).

Total enrollments at each of the District's schools from 2005-06 to 2010-11 are shown in Table 11. Enrollment change is calculated for the five year period.

Table 11
Enrollment History for Individual Schools, 2005-06 to 2010-11

School	Historic Enrollment						Change	
	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2005-06 to 2010-11	
Clackamas ES	370	385	350	362	324	346	-24	-6%
Duncan ES					500	476	476	
Happy Valley ES	708	761	901	984	604	564	-144	-20%
Mount Scott ES	470	485	473	510	466	493	23	5%
Oregon Trail ES	801	752	742	760	484	482	-319	-40%
Scouters Mountain ES					440	473	473	
Spring Mountain ES	618	587	550	554	508	486	-132	-21%
Sunnyside ES	543	588	590	607	500	493	-50	-9%
Happy Valley MS					615	686	686	
Rock Creek MS						567	567	
Sunrise MS	1,131	1,160	1,228	1,185	563	closed	-1,131	
Clackamas HS	2,053	2,196	2,271	2,222	2,362	2,285	232	11%
CHS Feeder System	6,694	6,914	7,105	7,184	7,366	7,351	657	10%
Ardenwald ES	286	273	248	264	470	458	172	60%
Campbell ES	336	296	307	311	313	306	-30	-9%
Lewelling ES	423	414	407	395	382	369	-54	-13%
Linwood ES	352	357	332	346	416	398	46	13%
Milwaukie ES	292	288	270	280	242	234	-58	-20%
Whitcomb ES	598	604	636	657	510	517	-81	-14%
Wichita ES	291	263	249	253	closed		-291	
Rowe MS	743	713	740	721	683	677	-66	-9%
Milwaukie HS	1,267	1,206	1,136	1,246	1,218	1,189	-78	-6%
MHS Feeder System	4,588	4,414	4,325	4,473	4,234	4,148	-440	-10%
Bilquist ES	497	473	483	449	450	431	-66	-13%
Concord ES	333	337	326	329	383	383	50	15%
Oak Grove ES	590	580	576	559	514	505	-85	-14%
Riverside ES	422	354	368	363	242	223	-199	-47%
View Acres ES	469	426	438	423	446	425	-44	-9%
Alder Creek MS	726	720	692	682	698	712	-14	-2%
Rex Putnam HS	1,435	1,475	1,418	1,415	1,303	1,285	-150	-10%
RPHS Feeder System	4,472	4,365	4,301	4,220	4,036	3,964	-508	-11%
El Puente ES	126	177	219	215	221	216	90	
Milwaukie eSchool	14	26	39	46	23	closed	-14	
Riverside Bilingual					57	82	82	
Sojourner School	179	179	181	182	192	182	3	
New Urban HS	see charters			212	185	191	191	
Other Programs	150	182	40	47	89	61	-89	
District-run Total	16,223	16,257	16,210	16,579	16,403	16,195	-28	0%
Cascade Heights		144	170	193	222	223	223	
Clack. Web Academy	317	380	410	448	454	482	165	
Clack. Middle College	120	244	330	317	303	292	172	
Milw. Academy of Arts	102	163	201	191	196	176	74	
New Urban HS	277	248	248	see district-run			-277	
Charters Total	816	1,179	1,359	1,149	1,175	1,173	357	44%
Grand Total	17,039	17,436	17,569	17,728	17,578	17,368	329	2%

Source: North Clackamas School District

ENROLLMENT FORECASTS

District-wide Long-range Forecast Methodology

To ensure that enrollment forecasts are consistent with the dynamics of likely population growth within the District, a grade progression enrollment model is combined with a demographic cohort-component model used to forecast population for the District by age and sex. The components of population change are births, deaths, and migration. Using age-specific fertility rates, age-sex specific mortality rates, age-sex specific migration rates, estimates of recent net migration levels, and forecasts of future migration levels, each component is applied to the base year population in a manner that simulates the actual dynamics of population change.

The 1990 and 2000 Census results are used as a baseline for the population forecasts. By “surviving” the 1990 population and 1990s births (estimating the population in each age group that would survive to the year 2000) and comparing the “survived” population to the actual 2000 population by age group, we are able to estimate the overall level of net migration between 1990 and 2000 as well as net migration by gender and age cohort. The net migration data was used to develop initial net migration rates, which were used as a baseline for rates used to forecast net migration for the 2000 to 2020 period.

We estimated the number of births to women residing within the District each year from 1989 to 2007, using data from the Oregon Department of Human Services, Center for Health Statistics. Detailed information including the age of mothers is incorporated in the establishment of fertility rates by age group for both 1990 and 2000. We adjusted the future fertility rates to reflect trends of decreasing fertility rates for women under age 25 and increases for women age 30 and older. These trends are based on state and national observations, as well as the number of births by age of mother occurring within the District during the 2001 to 2005 period for which detailed birth data is available.

Historic school enrollment is linked to the population forecast in two ways. First, the kindergarten and first grade enrollments at the time of the most recent census (the 1999-

2000 school year) are compared to the population at the appropriate ages counted in the census. The “capture rate,” or ratio of enrollment to population, is an estimate of the share of area children who are enrolled in NCSD schools. Assumptions for capture rates based on census data are used to bring new kindergarten and first grade students into the District’s enrollment. If there is evidence that capture rates have changed since the time of the census, they may be adjusted in the forecast. This forecast initially includes capture rates of 81 percent for kindergarten and 86 percent for first grade. These rates drop to 79 percent for kindergarten and 84 percent for first grade by mid-decade, reflecting a long term trend toward declining rates observed since 1990.

The other way that historic population and enrollment are linked is through migration. Annual changes in school enrollment by cohort closely follow trends in the net migration of children in the District’s population. Once the students are in first grade, a set of baseline GPRs are used to move students from one grade to the next. These rates, usually 1.00 for elementary grades, represent a scenario under which there is no change due to migration. Enrollment change beyond the baseline is added (or subtracted, if appropriate) at each grade level depending on the migration levels of the overall population by single years of age.

Population Forecast

Initial results of the 2010 Census are consistent with school enrollment, birth, and housing development data indicating that population gains within the District in the 2000 to 2010 decade were somewhat less than in the 1990s. Even so, population has grown due to both net migration (people moving in minus those moving out) and natural increase (births minus deaths). For the following decade, 2010 to 2020, assumptions about growth are based on long term historic trends as well as forecasts prepared by the State and Metro. Net migration is forecast to be higher in the 2010s than in the 2000s. Chart 3 shows 1990 to 2000 estimated and 2000 to 2020 forecasts of NCSD population growth attributable to net migration.

Although the young adult population will increase because of the larger baby boom “echo” cohort born in the 1980s and 1990s, the area loses many young adults due to out-

migration, and fertility rates are not expected to increase. Therefore, the number of births occurring to District residents is expected to increase very little from its current level. Table 12 shows historic births from 2000 to 2007 as well as forecasts from 2008 until 2015, the period that will have an impact on the enrollment forecasts presented in this study.

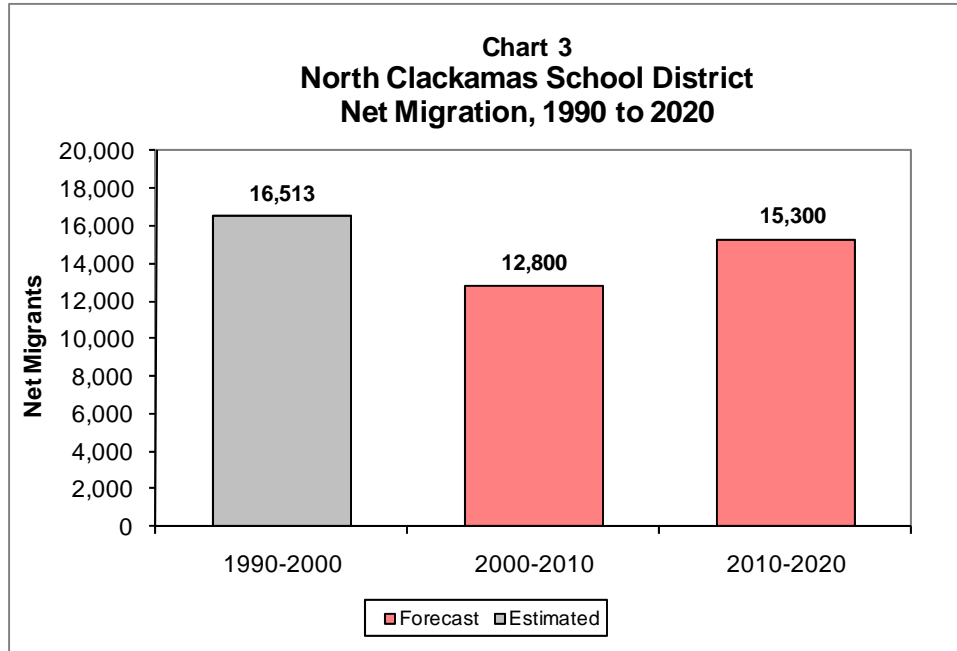


Table 12
Estimated and Forecast Births
North Clackamas School District

Year	Births
2000	1,305
2001	1,337
2002	1,281
2003	1,252
2004	1,302
2005	1,255
2006	1,308
2007	1,307
2008 (forecast)	1,324
2009 (forecast)	1,332
2010 (forecast)	1,319
2011 (forecast)	1,319
2012 (forecast)	1,332
2013 (forecast)	1,354
2014 (forecast)	1,386
2015 (forecast)	1,416

Source: 1990-2007 birth data from Oregon Center for Health Statistics allocated to NCSD boundary by PSU-PRC. 2008-2015 forecasts, PSU-PRC.

The 2010 population forecast for the NCSD is 114,883, an increase of 16,632 persons from the 2000 Census (1.6 percent average annual growth rate, or AAGR). The 2020 population forecast is 133,372, an additional increase of 18,489 persons. The 2010 to 2020 AAGR increases to 1.5 percent, which is lower than the 1.6 percent AAGR between 2010 and 2020 in the State of Oregon Office of Economic Analysis' most recent forecast for Clackamas County.⁷

The district-wide population forecasts by age group are presented in Table 13. These forecasts were completed before the 2010 Census results were released, so 2010 is a forecast, and the results do not reflect the census counts. The 2010 forecast is 1.6 percent higher than the 2010 Census population count, and the under age 18 population forecast is 1.8 percent higher than the 2010 Census. Detailed age group data is not yet available from the Census. In these forecasts, School-age population (5 to 17) has grown at about the same rate as total population since the 2000 Census, but is forecast to grow slower

⁷ "Forecasts of Oregon's County Populations and Components of Change, 2000 to 2040." Oregon Department of Administrative Services, Office of Economic Analysis, April, 2004.

than total population after 2010. The four percent growth rate of school age population between 2010 and 2020 is significantly lower than the overall population growth of 16 percent. Therefore the school age population share falls from 17.4 percent in 2010 to 15.7 percent in 2020. Between 2010 and 2020, the fastest growing age groups are older adults ages 60 to 74, followed by younger adults age 20 to 29.

Table 13
Population by Age Group
North Clackamas School District, 1990 to 2020

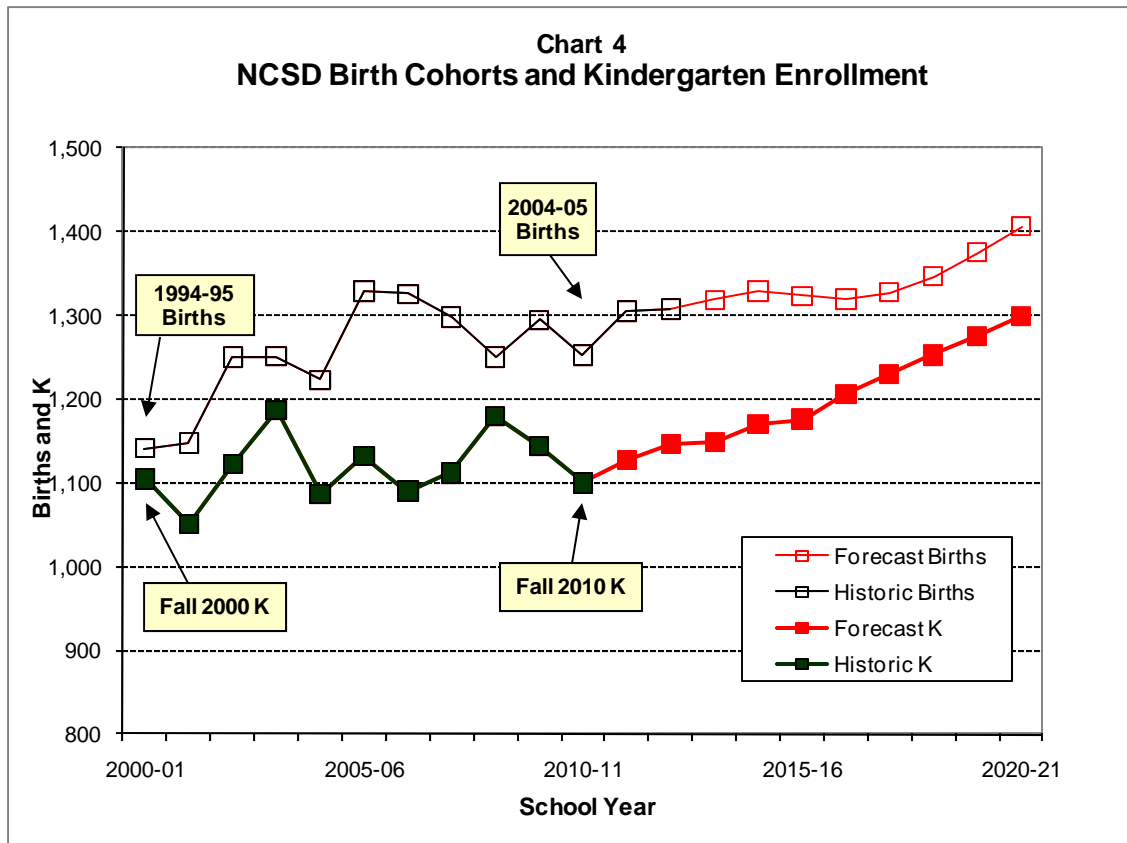
	1990	2000	2010	2020	2000 to 2020 Change	
	Census	Census	Forecast	Forecast	Number	Percent
Under Age 5	5,103	6,667	6,751	7,859	1,192	18%
Age 5 to 9	5,192	6,737	7,397	8,083	1,346	20%
Age 10 to 14	5,284	6,714	7,919	7,903	1,189	18%
Age 15 to 17	2,956	3,827	4,708	4,912	1,085	28%
Age 18 to 19	1,920	2,517	3,085	3,457	940	37%
Age 20 to 24	5,051	6,438	7,150	8,965	2,527	39%
Age 25 to 29	5,883	6,773	7,865	9,738	2,965	44%
Age 30 to 34	6,492	6,946	7,836	8,954	2,008	29%
Age 35 to 39	6,715	7,556	7,920	9,275	1,719	23%
Age 40 to 44	6,356	8,005	7,951	9,171	1,166	15%
Age 45 to 49	4,927	8,028	8,453	9,033	1,005	13%
Age 50 to 54	3,874	7,020	8,664	8,513	1,493	21%
Age 55 to 59	3,364	5,123	8,273	8,612	3,489	68%
Age 60 to 64	3,402	3,600	6,586	8,041	4,441	123%
Age 65 to 69	3,372	2,899	4,551	7,173	4,274	147%
Age 70 to 74	2,620	2,852	3,078	5,502	2,650	93%
Age 75 to 79	2,167	2,679	2,291	3,546	867	32%
Age 80 to 84	1,472	1,985	2,043	2,236	251	13%
Age 85 and over	1,265	1,885	2,362	2,398	513	27%
Total Population	77,415	98,251	114,883	133,372	35,121	36%
Total age 5 to 17	13,432	17,278	20,024	20,898	3,620	21%
share age 5 to 17	17.4%	17.6%	17.4%	15.7%		

	1990-2000	2000-2010	2010-2020
Population Change	20,836	16,632	18,489
Percent	27%	17%	16%
Average Annual	2.4%	1.6%	1.5%

Source: U.S. Census Bureau, 1990 and 2000 Censuses; data aggregated to NCSD boundary by Portland State University Population Research Center. PSU-PRC Forecasts, 2010 and 2020.

District-wide Enrollment Forecast

Chart 4 compares the historic and forecast number of births in the District with the historic and forecast number of NCSD kindergarten students. The chart shows the relationship between the number of births in the District and the kindergarten class sizes five years later. Births correspond to kindergarten cohorts (September to August). Although many children move into and out of the District between birth and age five, and not all District residents attend NCSD kindergartens, the trend in kindergarten enrollment has roughly followed birth cohort trends. Kindergarten classes in the late 1990s and early 2000s ranged from three to 10 percent smaller than their corresponding birth cohorts. This shortfall was too small to account for children who do not enroll in NCSD kindergartens, demonstrating net gains due to migration. The Fall 2010 kindergarten class was 12 percent smaller than the corresponding birth cohort, those children born between September 2004 and August 2005.



In Fall 2010, kindergarten enrollment fell for the second consecutive year. However, unlike Fall 2009, when a larger kindergarten was expected due to the increase in corresponding births, the 2004-05 births corresponding to Fall 2010 kindergarten enrollment also trended down from the previous year. Based on the relationship between District births and subsequent kindergarten class size, the number of NCSD kindergartners is forecast to increase slightly throughout the forecast horizon.

Several years of recent NCSD enrollment history were evaluated to develop initial grade progression rates (GPRs) for the forecast. Table 14 uses Grade Progression Rates (GPRs) to show that the NCSD typically gains students due to migration at nearly every grade level. The GPR is the ratio of enrollment in a specific grade in one year to the enrollment of the same age cohort in the previous year. For example, the number of students enrolled in second grade this year divided by the number of students enrolled in first grade last year. Rates for some grades may be consistently high, indicating that new students are entering the District from private schools. For this reason, it is common to see higher GPRs for the K-1st and 8th-9th grade transitions. In grades 10, 11, or 12, low GPRs can indicate that students are leaving high school or being retained at lower grade levels. But for most elementary and middle grades, if the population entering and leaving the District is in balance and there is not widespread grade retention, one can expect GPRs very close to 1.00.

In the first year of the forecast, 2011-12, grade progression rates are similar to the 2010-11 rates. They gradually increase during the forecast period, reflecting the expectation that regional housing demand will increase and the large supply of developable residential land will once again make the District a magnet for a share of the region's growth.

Over the last 10 years, average GPRs for each grade from 1st to 8th range from 1.01 to 1.03, indicating net growth of one to three percent more students each year. Grade progression rates are higher for K to 1st grade, likely due to enrollment of students who attended private schools for kindergarten. Similarly, higher grade progression rates are observed for the 8th to 9th grade transition as students enter District high schools from

private K-8 schools. The forecasts include enrollment growth due to migration, though generally at lower rates than the averages of the past 10 years.

Table 14 Grade Progression Rates¹ NCSD, Historic and Forecast			
Grade Transition	Historic Average: 2000-01 to 2010-11	Baseline (without the influence of migration)	Forecast Average: 2010-11 to 2020-21
K-1	1.10	-- ²	1.09
1-2	1.01	1.00	1.02
2-3	1.01	0.99	1.00
3-4	1.02	1.01	1.02
4-5	1.02	1.00	1.01
5-6	1.03	1.00	1.01
6-7	1.03	1.00	1.01
7-8	1.02	1.00	1.01
8-9	1.06	1.04	1.06
9-10	1.01	1.00	1.02
10-11	1.01	1.00	1.02
11-12	0.96	1.00	1.02

1. Ratio of enrollment in an individual grade to enrollment in the previous grade the previous year.
2. The enrollment forecast model uses capture rates for first grade; K-1 baseline GPRs are not used.

Total K-12 enrollment is forecast to fall again next year, and then gradually grow between 2012-13 and 2017-18. The pace of increase steepens towards the end of the forecast horizon between 2018-19 and 2020-21. Enrollment in Fall 2015 is 306 students (two percent) higher while the enrollment in Fall 2020 is 1092 students (six percent) higher than Fall 2010 enrollment. Most of the forecast growth is concentrated at the elementary level. In spite of a 32 student decline forecast for 2011-12, elementary enrollments gain a net of 778 students between 2010-11 and 2020-21. Secondary enrollments are expected to grow very little. This forecast shows a net increase of only 80 students in middle school and 234 students in high school in the next ten years.

Table 15 contains grade level forecasts for the North Clackamas School District for each year from 2011-12 to 2020-21. The forecasts are also summarized by grade level groups (K-5, 6-8, and 9-12).

Table 15
North Clackamas School District, Enrollment Forecasts, 2011-12 to 2020-21¹

Actual		Forecast									
Grade	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
K	1,100	1,128	1,146	1,149	1,170	1,176	1,206	1,230	1,253	1,276	1,300
1	1,254	1,200	1,218	1,247	1,248	1,271	1,281	1,311	1,338	1,363	1,383
2	1,252	1,263	1,216	1,242	1,269	1,270	1,296	1,304	1,334	1,362	1,383
3	1,220	1,247	1,263	1,222	1,247	1,274	1,276	1,301	1,309	1,339	1,364
4	1,263	1,240	1,274	1,296	1,253	1,278	1,308	1,308	1,334	1,342	1,369
5	1,292	1,271	1,255	1,296	1,316	1,273	1,300	1,329	1,329	1,355	1,360
6	1,321	1,300	1,286	1,276	1,316	1,337	1,295	1,320	1,350	1,350	1,373
7	1,376	1,329	1,315	1,308	1,296	1,337	1,360	1,315	1,341	1,371	1,368
8	1,353	1,385	1,344	1,337	1,328	1,316	1,360	1,381	1,335	1,362	1,389
9	1,361	1,417	1,459	1,424	1,414	1,405	1,394	1,438	1,461	1,412	1,436
10	1,434	1,371	1,436	1,487	1,450	1,439	1,432	1,419	1,464	1,487	1,433
11	1,421	1,444	1,389	1,464	1,514	1,476	1,467	1,458	1,444	1,490	1,509
12	1,440	1,431	1,463	1,416	1,490	1,541	1,505	1,493	1,484	1,470	1,512
UN²	281	281	281	281	281	281	281	281	281	281	281
Total	17,368	17,307	17,345	17,445	17,592	17,674	17,761	17,888	18,057	18,260	18,460
Annual change		-61	38	100	147	82	87	127	169	203	200
		-0.4%	0.2%	0.6%	0.8%	0.5%	0.5%	0.7%	0.9%	1.1%	1.1%
K-5	7,381	7,349	7,372	7,452	7,503	7,542	7,667	7,783	7,897	8,037	8,159
6-8	4,050	4,014	3,945	3,921	3,940	3,990	4,015	4,016	4,026	4,083	4,130
9-12	5,656	5,663	5,747	5,791	5,868	5,861	5,798	5,808	5,853	5,859	5,890

	5 Year Growth: 2010-11 to 2015-16		5 Year Growth: 2015-16 to 2020-21		10 Year Growth: 2010-11 to 2020-21	
	Growth	Pct.	Growth	Pct.	Growth	Pct.
K-5	161	2%	617	8%	778	11%
6-8	-60	-1%	140	4%	80	2%
9-12	205	4%	29	0%	234	4%
Total	306	2%	786	4%	1,092	6%

1. Includes enrollment at charter schools.

2. "UN" is ungraded special education, not included in K-6, 7-8, and 9-12 totals.

Population Research Center,
 Portland State University, January 2011

Individual School Forecasts

Forecasts are prepared for individual schools under a scenario in which the recently adopted 2011-12 boundaries and grade configurations remain constant. They incorporate the 2011 closures of Clackamas and Campbell Elementary Schools and the corresponding expansion of boundaries at Bilquist, Duncan, Sunnyside, Ardenwald, and Lewelling Elementary Schools, the transfer of a small portion of the former Clackamas Elementary boundary from Rock Creek Middle School and Clackamas High School to Alder Creek Middle School and Rex Putnam High School, and the reassignment of sixth grade from elementary schools to middle schools.

Additional changes have not been proposed, but future program changes, school choice policies, or other decisions about individual schools and the students they serve could impact enrollment in ways that these forecasts do not anticipate. The individual school forecasts depict what future enrollments might be if today's facilities, programs, and boundaries were unchanged.

The methodology for the individual school forecasts relies on unique sets of grade progression rates for each school and the ratio of kindergarten enrollment to lagged births within the school's attendance area. New kindergarten classes are based on the number of births and a ratio that incorporates the expected level of migration between birth and age five as well as the public school "capture" rate. Subsequent grades are forecast using GPRs based initially on recent rates and adjusted based on expected levels of housing growth. The final forecasts for individual schools are controlled to match the district-wide forecasts.

Normally, the model would incorporate long-term trends in kindergarten enrollment and grade progressions for individual schools, but that was not possible for some schools because of the 2009 and 2011 boundary changes. We have matched students by resident address for the past four years, allowing for aggregation to the new attendance areas, which is helpful since most NCSD students attend their neighborhood schools. However, the individual school forecasts should be used with caution due to the uncertainty

introduced by new boundaries, new schools in 2009 and 2010, and school closures in 2009 and 2011.

The school forecasts are labeled provisional because they are simply an extension of an earlier series of forecasts with a five year horizon. The next update will incorporate new 2010 Census data for each attendance area and a 2011 release of long range planning assumptions from Metro's recent forecast.

In the past five years new charter schools and other district-run schools and programs serving the entire District have opened, giving families new options other than their neighborhood school. Relatively little change is forecast among these non-neighborhood schools. The only significant changes modeled for these schools are that Riverside Bilingual School will continue to add a grade each year until it serves grades K-5 in 2013-14, and that El Puente will continue to admit just one new kindergarten class each year, gradually decreasing its enrollment.

The neighborhood schools continue the recent pattern of enrollment gains in the CHS feeder system, show a mild turnaround with modest growth for RPHS feeder system, and losses in the MHS feeder system. After the 2011 boundary adjustments take effect, CHS feeder system schools are expected to gain 903 students in the remaining nine years of the forecast, the RPHS feeder system schools are expected to gain 517 students, and the MHS feeder system schools are expected to lose 299 students.

Table 16 presents the enrollment forecasts for each school, grouped by feeder system. Profiles in Appendix A for each school include enrollment history, enrollment forecasts, and school capacities.

Table 16
Provisional¹ Enrollment Forecasts for Individual Schools, 2011-12 to 2020-21

School	Historic 2010-11	Forecast										Forecast Change ² 2011-12 to 2020-21	
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Number	Percent
Clackamas ES	346	<i>closed</i>											
Duncan ES	476	463	449	470	480	482	502	516	537	563	587	124	27%
Happy Valley ES	564	461	449	443	442	434	449	461	474	489	500	39	8%
Mount Scott ES	493	417	423	439	447	457	475	480	484	489	487	70	17%
Oregon Trail ES	482	382	385	400	411	418	437	450	457	464	465	83	22%
Scouters Mountain ES	473	416	429	435	445	457	461	478	483	497	512	96	23%
Spring Mountain ES	486	404	414	425	435	447	466	488	503	515	527	123	30%
Sunnyside ES	493	533	555	557	577	576	576	575	589	605	623	90	17%
Happy Valley MS	686	949	941	946	960	968	959	958	981	1,014	1,051	102	11%
Rock Creek MS	567	872	842	808	769	793	825	872	873	878	878	6	1%
Clackamas HS	2,285	2,298	2,344	2,368	2,458	2,461	2,435	2,398	2,407	2,422	2,468	170	7%
CHS Feeder System	7,351	7,195	7,231	7,291	7,424	7,493	7,585	7,676	7,788	7,936	8,098	903	13%
Ardenwald ES	458	528	512	500	478	473	477	476	477	481	483	-45	-9%
Campbell ES	306	<i>closed</i>											
Lewelling ES	369	390	375	375	363	359	359	365	365	367	368	-22	-6%
Linwood ES	398	318	307	304	299	295	296	296	298	301	304	-14	-4%
Milwaukie ES	234	175	177	179	182	180	183	187	189	192	196	21	12%
Whitcomb ES	517	477	484	483	474	481	475	468	467	469	476	-1	0%
Rowe MS	677	1,030	1,014	989	990	963	952	903	895	895	889	-141	-14%
Milwaukie HS	1,189	1,173	1,185	1,187	1,205	1,197	1,173	1,172	1,135	1,100	1,076	-97	-8%
MHS Feeder System	4,148	4,091	4,054	4,017	3,991	3,948	3,915	3,867	3,826	3,805	3,792	-299	-7%

table continued on next page

Table 16 (continued)

Provisional¹ Enrollment Forecasts for Individual Schools, 2011-12 to 2020-21

School	Historic 2010-11	Forecast										Forecast Change ² 2011-12 to 2020-21	
		2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	Number	Percent
Bilquist ES	431	478	476	479	488	496	497	501	509	516	525	47	10%
Concord ES	383	325	337	330	329	328	336	343	349	356	361	36	11%
Oak Grove ES	505	431	438	451	452	452	456	459	465	472	477	46	11%
Riverside ES	223	193	182	181	191	188	195	203	210	217	222	29	15%
View Acres ES	425	384	402	416	423	431	439	449	453	456	458	74	19%
Alder Creek MS	712	1,053	1,037	1,064	1,108	1,152	1,164	1,166	1,160	1,179	1,195	142	13%
Rex Putnam HS	1,285	1,295	1,324	1,334	1,297	1,295	1,282	1,330	1,403	1,429	1,438	143	11%
RPHS Feeder System	3,964	4,159	4,196	4,255	4,288	4,342	4,369	4,451	4,549	4,625	4,676	517	12%
El Puente ES	216	177	159	146	147	148	148	148	148	148	148	-29	-16%
Riverside Bilingual	82	105	126	145	144	144	144	144	144	144	144	39	37%
Sojourner School	182	155	155	155	155	155	155	155	155	155	155	0	0%
New Urban HS	191	191	191	191	191	191	191	191	191	191	191	0	0%
Other Programs	61	61	61	61	61	61	61	61	61	61	61	0	0%
District-run Total	16,195	16,134	16,173	16,261	16,401	16,482	16,568	16,693	16,862	17,065	17,265	1,131	7%
Cascade Heights	223	223	225	229	230	231	232	234	234	234	234	11	5%
Clack. Web Academy	482	482	482	482	482	482	482	482	482	482	482	0	0%
Clack. Middle College	292	292	292	292	292	292	292	292	292	292	292	0	0%
Milw. Academy of Arts	176	176	173	181	187	187	187	187	187	187	187	11	6%
Charters Total	1,173	1,173	1,172	1,184	1,191	1,192	1,193	1,195	1,195	1,195	1,195	22	2%
Grand Total	17,368	17,307	17,345	17,445	17,592	17,674	17,761	17,888	18,057	18,260	18,460	1,153	7%

1. Updated forecasts later this year will incorporate new releases of regional planning assumptions and 2010 Census data.

2. Change between 1st and 10th year of forecast, following the 2011 school closures and assignment of grade 6 to middle schools.

Historic Enrollment: North Clackamas School District

Forecast: Population Research Center, Portland State University, May 2011.

FORECAST ERROR AND UNCERTAINTY

In general, forecast error varies according to the size of the population being forecast and the length of the forecast horizon. The smaller the population and the longer the forecast period, the larger the error is likely to be. In particular, the school level forecasts depend on assumptions about the distribution of housing and population growth in small areas within the District over a five year period, so they should be used as only one of many tools in the planning process. The grade level forecasts are also subject to larger error than the total K-12 enrollments.

Due to the nature of forecasting, there is no way to estimate a confidence interval as one might for data collected from a survey. The best way to measure potential forecast error is to compare actual enrollments with previous forecasts that were conducted using similar data and methodologies. In Table 17, the actual NCSD enrollment by grade level in Fall 2010 is compared with the 2010-11 forecasts that were prepared last year, as well as those prepared three years earlier. Total K-12 enrollment was 71 students higher than what was forecast a year ago — an error of four tenths of one percent. Errors in forecasts for individual grades are as high as 2.8 percent. As a measure of average error for grade levels and for individual school enrollments, the table includes the mean absolute percent error (MAPE) in the table. The grade level MAPE for last year's forecast was 1.3 percent. The three year forecasts for 2010-11 were prepared in 2008, when the extent of the housing crisis and recession were not yet known. That forecast did predict much slower growth than previous trends would have indicated, but it did not anticipate enrollment losses, and predicted about 300 more students (1.7 percent) than were actually enrolled in 2010-11.

Table 17
Fall 2010 Enrollment Compared to Previous Forecasts
By Grade Level

Grade	Actual	One year forecast ¹			Three year forecast ²		
		Fcst.	Diff.	Error	Fcst.	Diff.	Error
K	1,100	1,127	27	2.5%	1077	-23	-2.1%
1	1,254	1,219	-35	-2.8%	1239	-15	-1.2%
2	1,252	1,271	19	1.5%	1215	-37	-3.0%
3	1,220	1,231	11	0.9%	1274	54	4.4%
4	1,263	1,241	-22	-1.7%	1290	27	2.1%
5	1,292	1,300	8	0.6%	1396	104	8.0%
6	1,321	1,331	10	0.8%	1378	57	4.3%
7	1,376	1,369	-7	-0.5%	1420	44	3.2%
8	1,353	1,369	16	1.2%	1429	76	5.6%
9	1,361	1,358	-3	-0.2%	1417	56	4.1%
10	1,434	1,444	10	0.7%	1491	57	4.0%
11	1,421	1,461	40	2.8%	1422	1	0.1%
12	1,440	1,438	-2	-0.1%	1409	-31	-2.2%
UN ²	281	280	-1		211	-70	
Total	17,368	17,439	71	0.4%	17,668	300	1.7%
MAPE³		1.3%			3.2%		

1. Forecast for 2010-11 by PSU-PRC, baseline 2009-10 enrollment, February 2010

2. Forecast for 2010-11 by PSU-PRC, baseline 2007-08 enrollment, August 2008

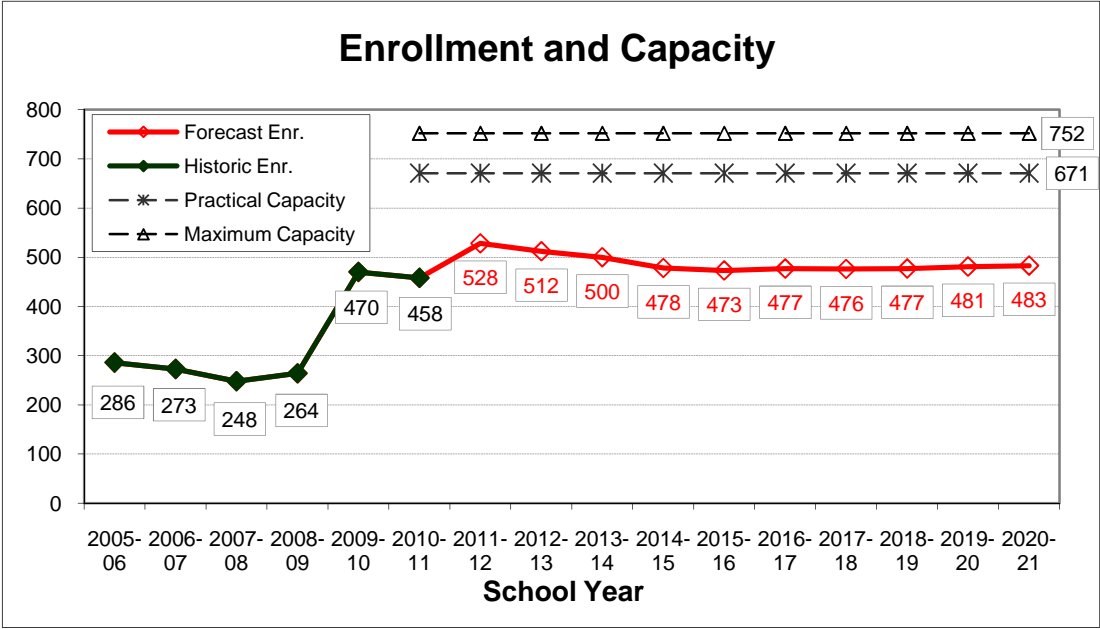
3. Mean absolute percent error for individual grades K-12.

Because of the uncertainties of forecasts described in this section, it is important to monitor the results and update the forecast as new information becomes available. New information may be school enrollment data, new census data, a resurgence of new housing development, or land use changes that may result in housing or economic growth that differs significantly from recent and current trends.

APPENDIX A

ENROLLMENT AND CAPACITY PROFILES FOR INDIVIDUAL SCHOOLS

Ardenwald Elementary School

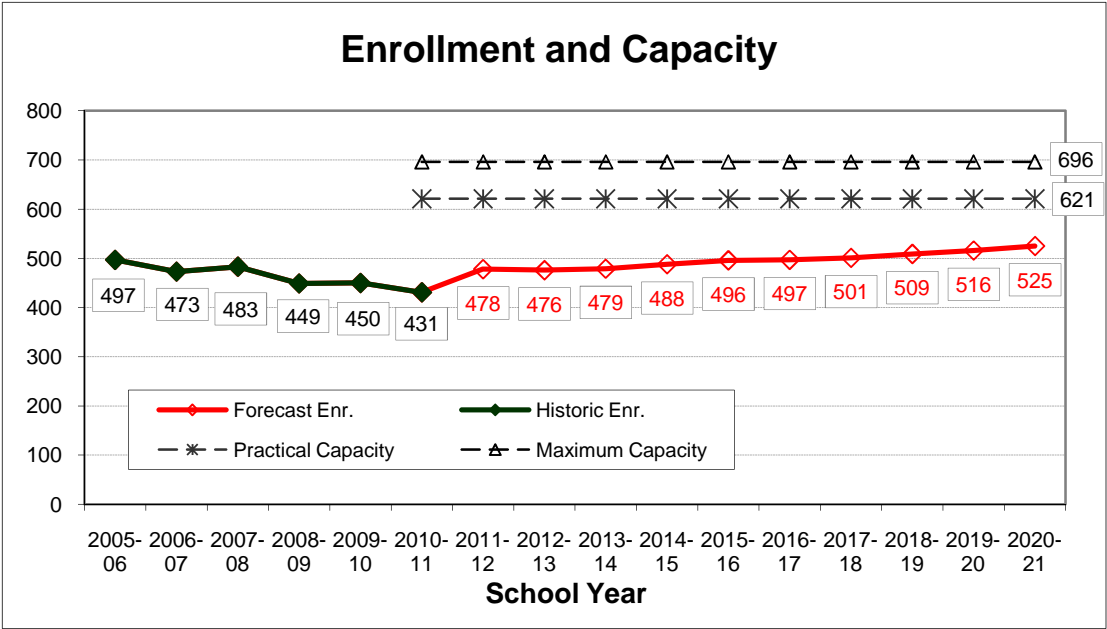


Note: A boundary change in 2009 resulted in a portion of the Lewelling attendance area being reassigned to Ardenwald. Campbell Elementary closed in 2011 and a portion of its attendance area was reassigned to Ardenwald.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	286	458	528	512	500	478	473	477	476	477	481	483
Five Year Change	172		15					10				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Bilquist Elementary School

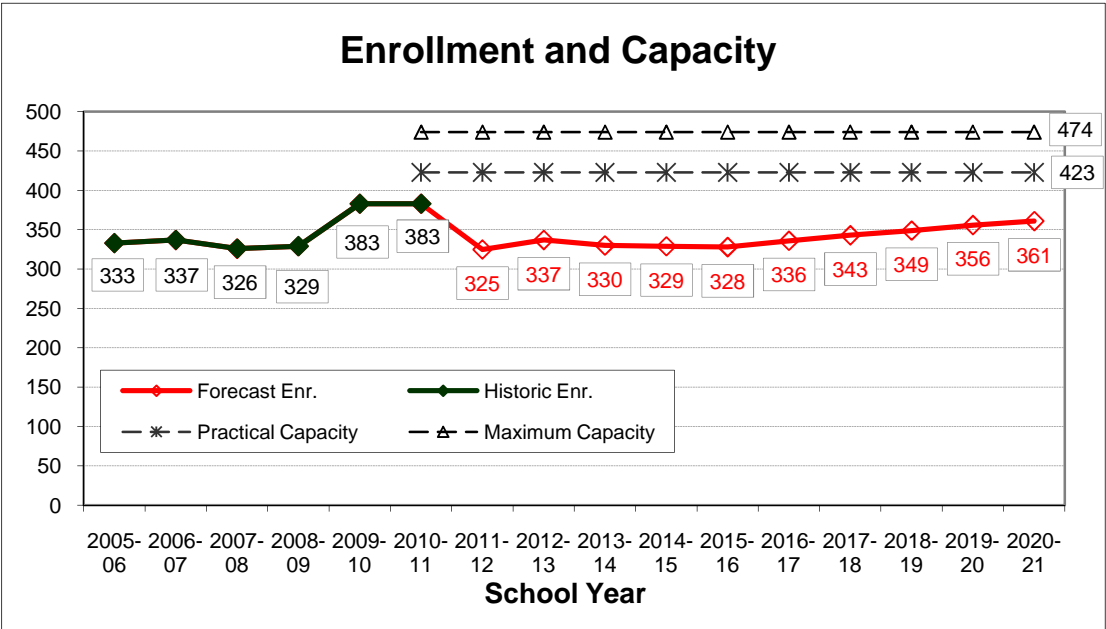


Note: Clackamas Elementary closed in 2011 and a portion of its attendance area was reassigned to Bilquist.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	497	431	478	476	479	488	496	497	501	509	516	525
Five Year Change	-66		65					29				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Concord Elementary School

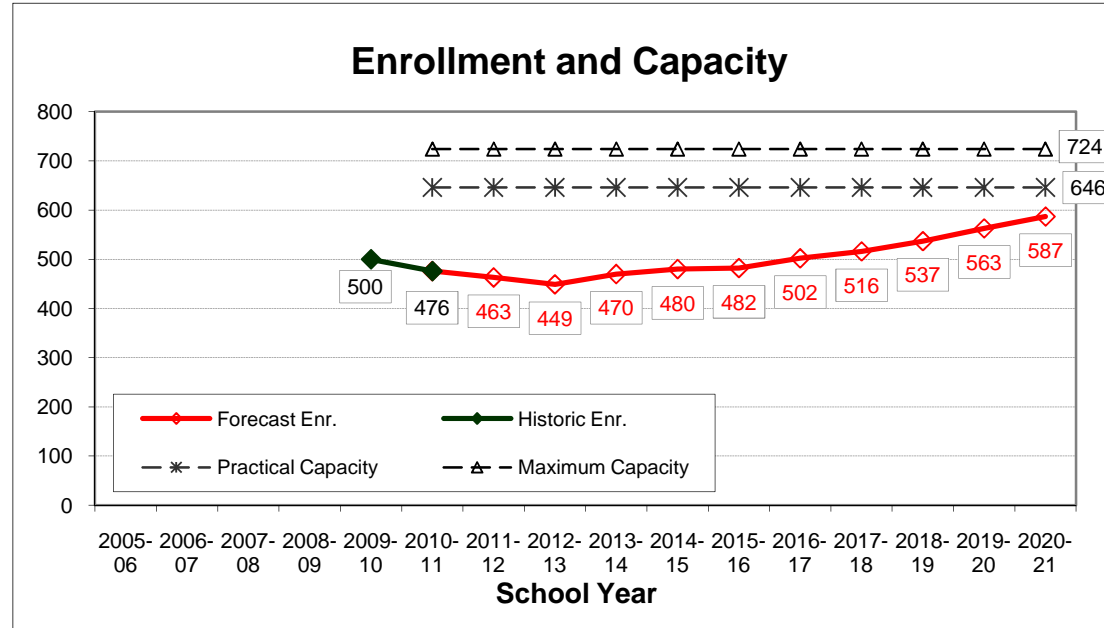


Note: A boundary change in 2009 resulted in a portion of the Riverside attendance area being reassigned to Concord.

Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	333	383	325	337	330	329	328	336	343	349	356	361
Five Year Change	50							-55				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Duncan Elementary School

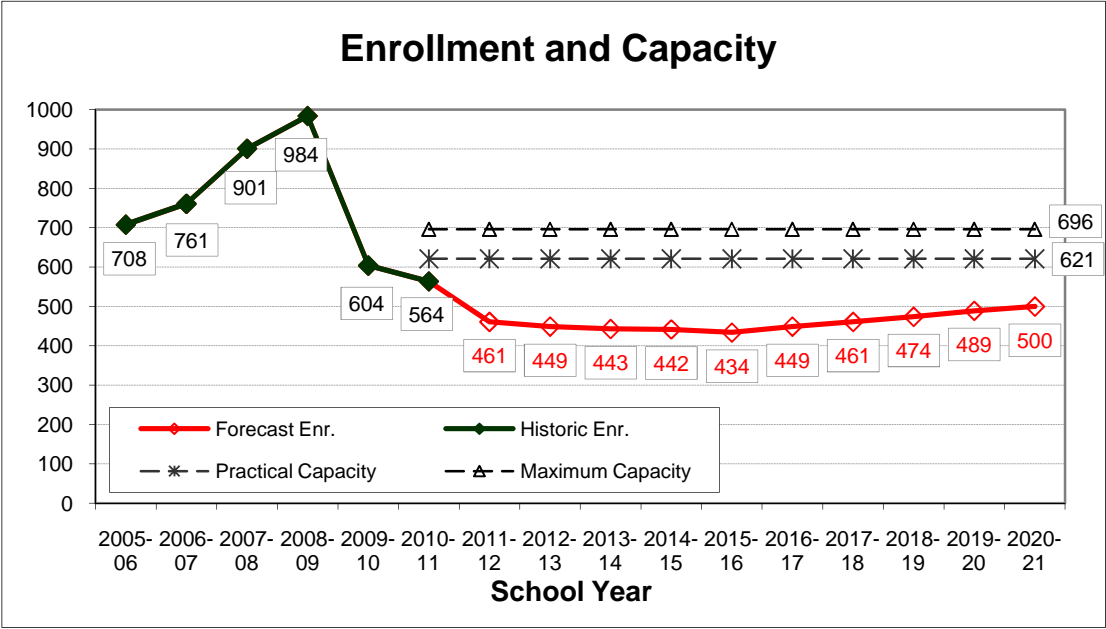


Note: Duncan Elementary School opened in 2009. Portions of the Clackamas and Oregon Trail attendance areas were reassigned to Duncan. Clackamas Elementary closed in 2011 and a portion of its attendance area was reassigned to Duncan.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	0	476	463	449	470	480	482	502	516	537	563	587
Five Year Change	476		6					105				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Happy Valley Elementary School

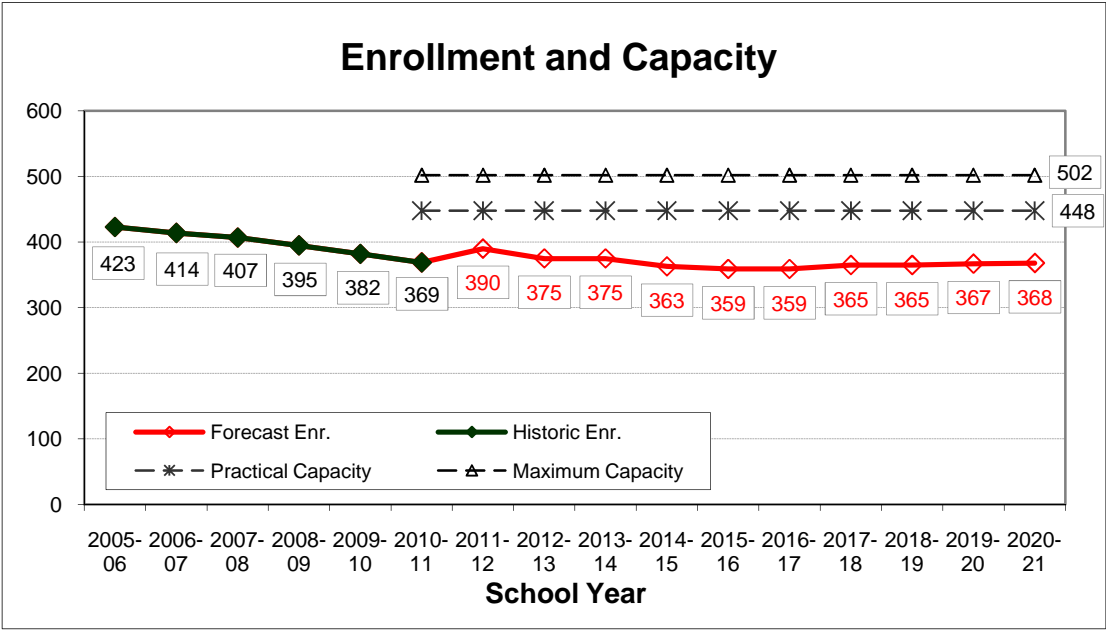


Note: A boundary change in 2009 resulted in a portion of the attendance area being reassigned to Scouters Mountain Elementary.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	708	564	461	449	443	442	434	449	461	474	489	500
Five Year Change	-144		-130					66				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Lewelling Elementary School

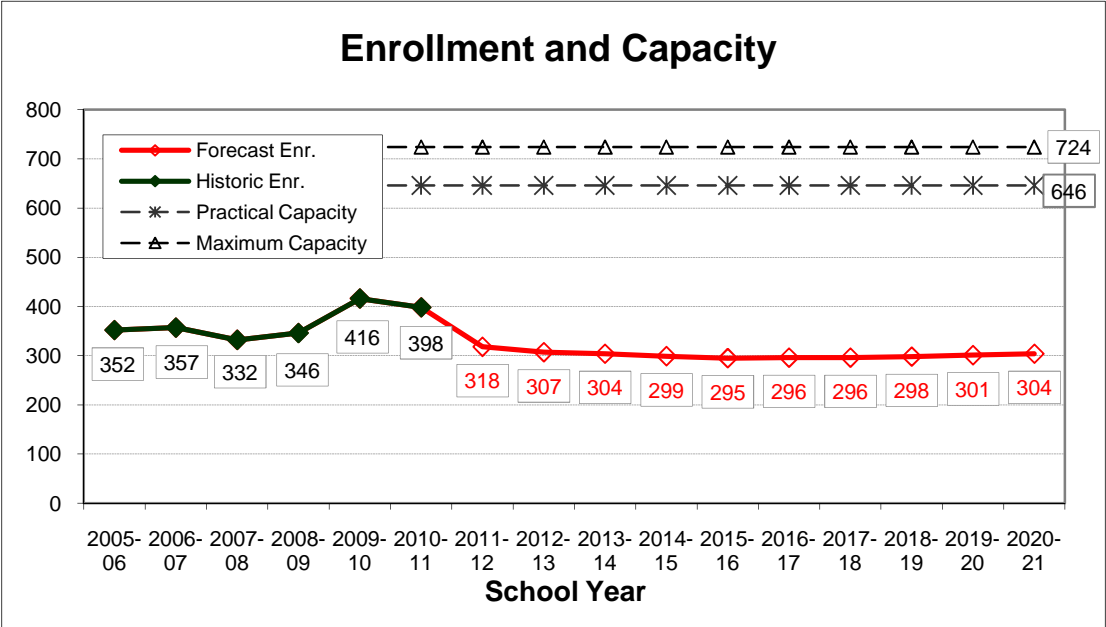


Note: Wichita Elementary closed in 2009 and a portion of its attendance area was reassigned to Lewelling. At the same time a portion of Lewelling's attendance area was reassigned to Ardenwald and a portion of Whitcomb's attendance area was reassigned to Lewelling. Campbell Elementary closed in 2011 and a portion of its attendance area was reassigned to Lewelling.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	423	369	390	375	375	363	359	359	365	365	367	368
Five Year Change	-54		-10					9				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Linwood Elementary School

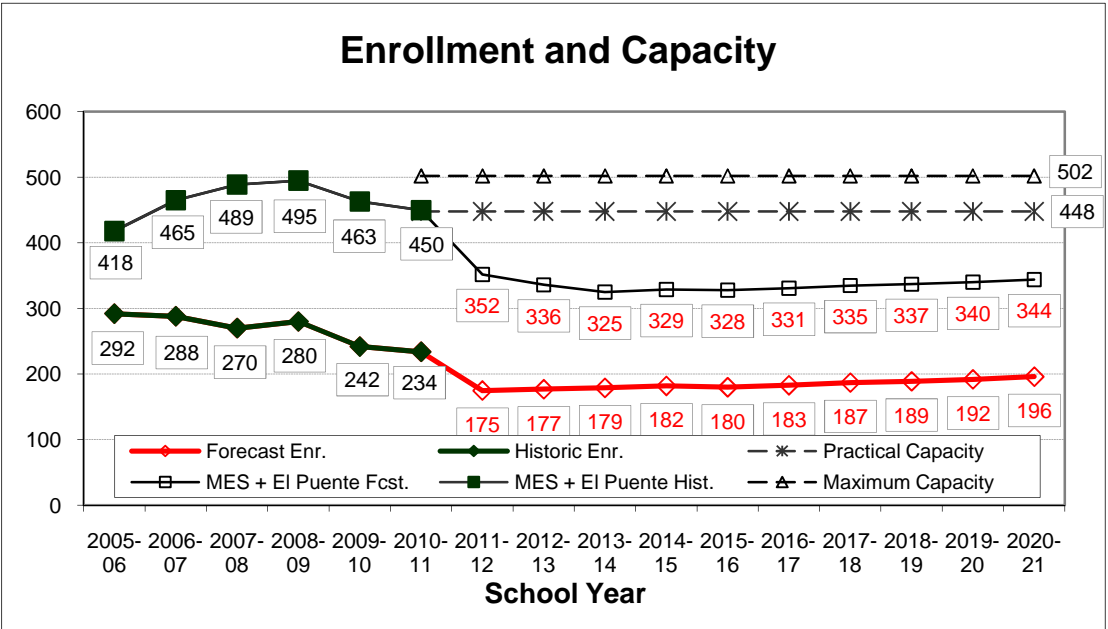


Note: A boundary change in 2009 resulted in a portion of Whitcomb's attendance area being reassigned to Linwood.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	352	398	318	307	304	299	295	296	296	298	301	304
Five Year Change	46		-103					9				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Milwaukie Elementary School

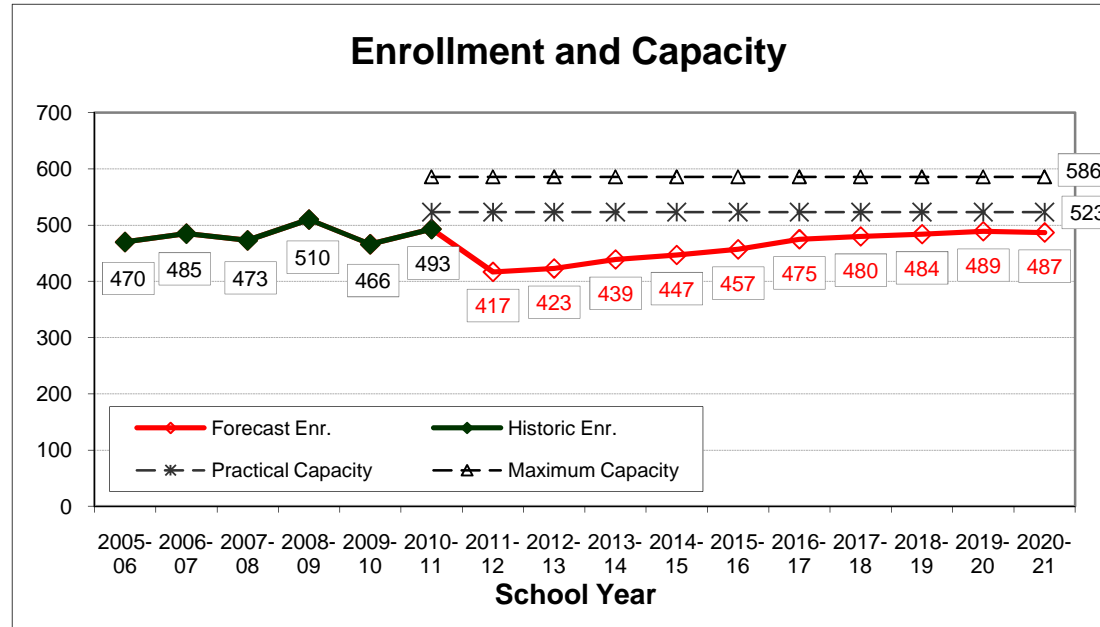


Note: El Puente Bilingual School shares the Milwaukie Elementary School facility.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	292	234	175	177	179	182	180	183	187	189	192	196
Five Year Change	-58		-54					16				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Mount Scott Elementary School

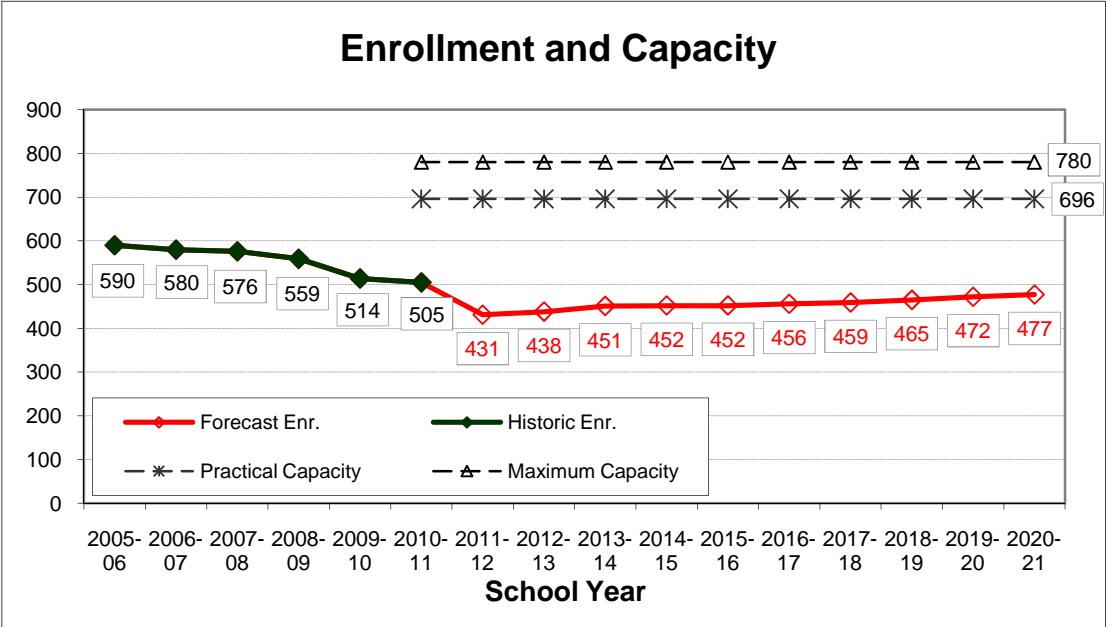


Note: A boundary change in 2009 resulted in a portion of the attendance area being reassigned to Spring Mountain Elementary.

Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	470	493	417	423	439	447	457	475	480	484	489	487
Five Year Change	23							-36				
										30		

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

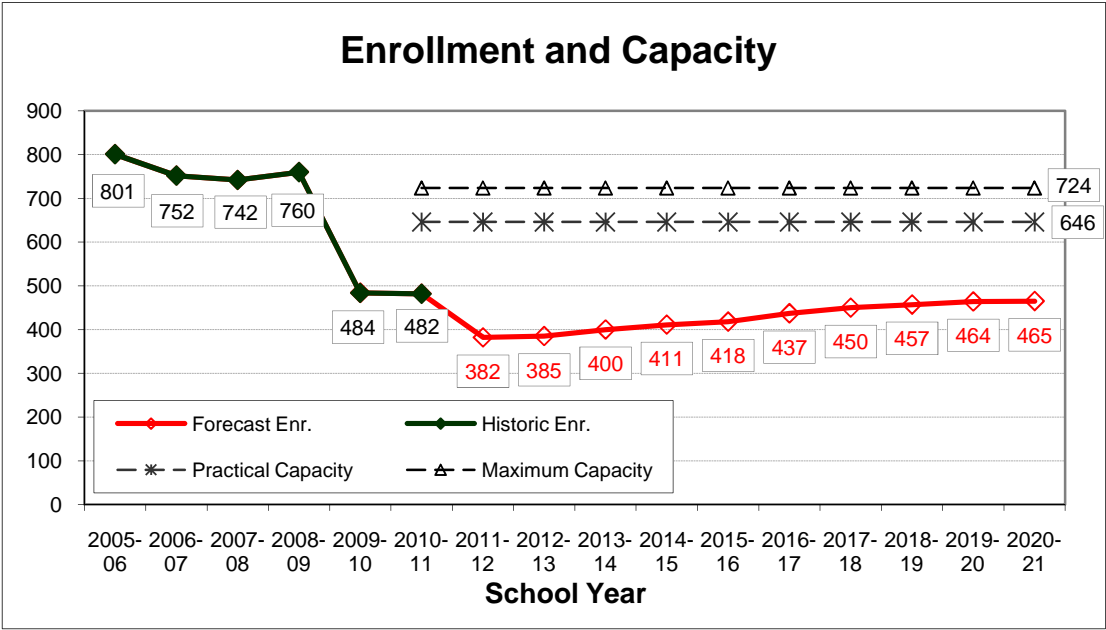
Oak Grove Elementary School



	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	590	505	431	438	451	452	452	456	459	465	472	477
Five Year Change	-85		-53					25				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Oregon Trail Elementary School

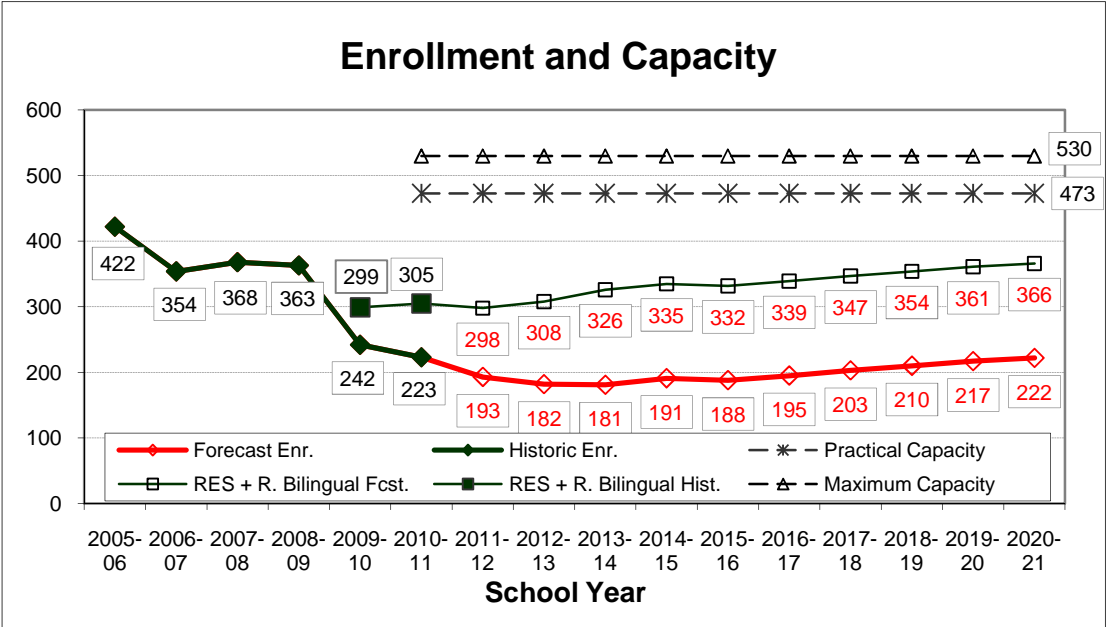


Note: Boundary changes in 2009 resulted in a portion of the attendance area being reassigned to Duncan Elementary and portions of the Spring Mountain and Sunnyside attendance areas being reassigned to Oregon Trail.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	801	482	382	385	400	411	418	437	450	457	464	465
Five Year Change	-319		-64					47				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Riverside Elementary School

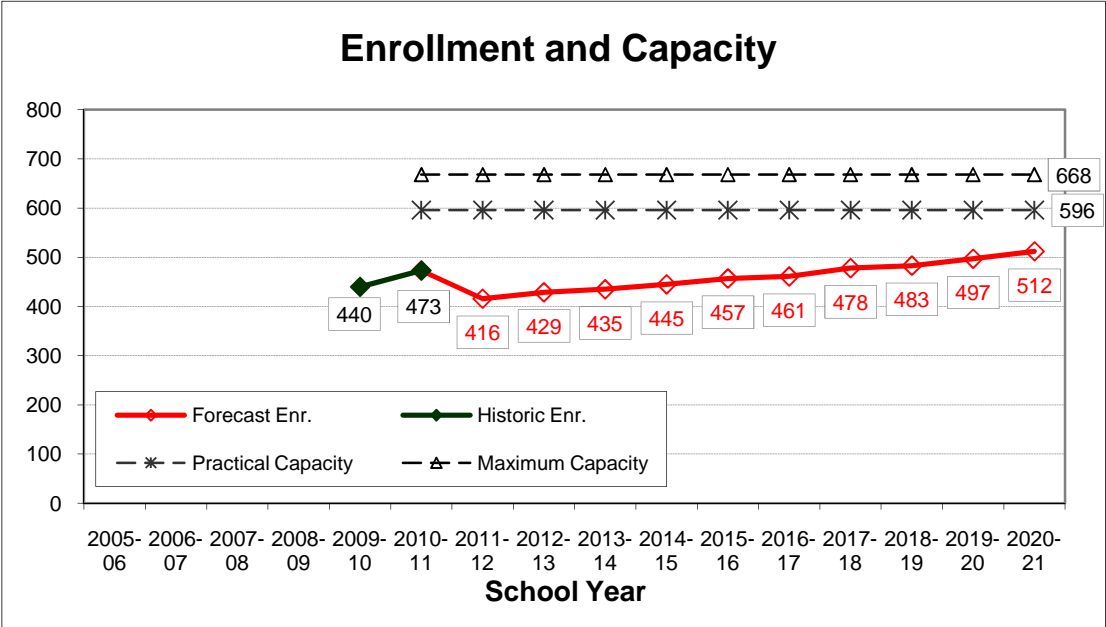


Note: A boundary change in 2009 resulted in a portion of the Riverside Elementary area being reassigned to Concord Elementary. Riverside Bilingual School opened in 2009, sharing the Riverside Elementary School facility.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	422	223	193	182	181	191	188	195	203	210	217	222
Five Year Change	-199		-35					34				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Scouters Mountain Elementary School

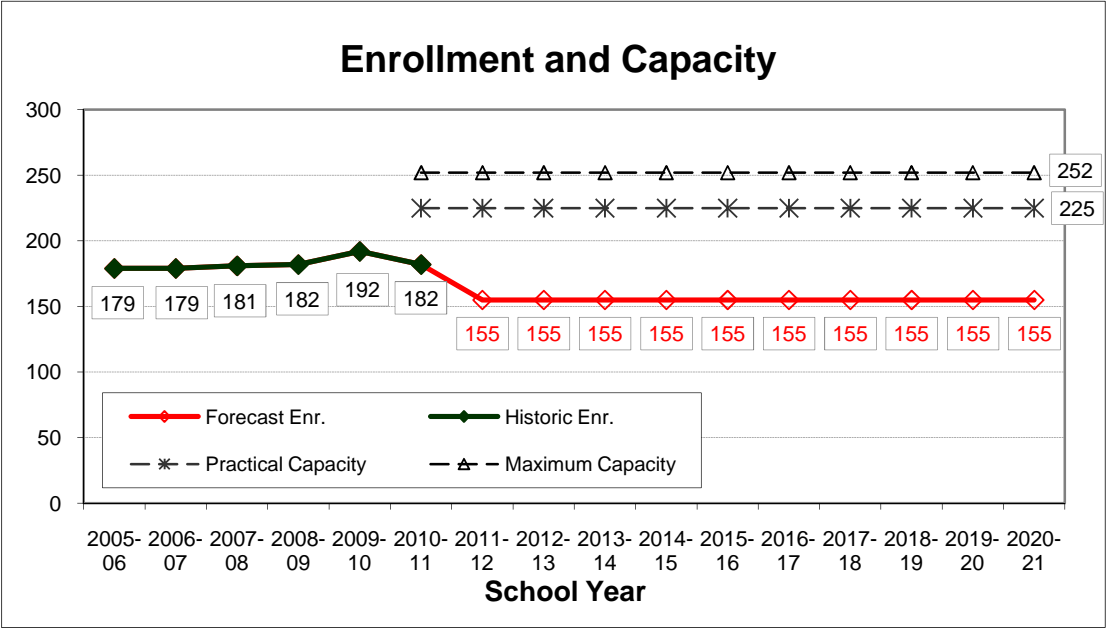


Note: Scouters Mountain Elementary School opened in 2009. A portions of the Happy Valley attendance area was reassigned to Scouters Mountain.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	0	473	416	429	435	445	457	461	478	483	497	512
Five Year Change	473		-16					55				

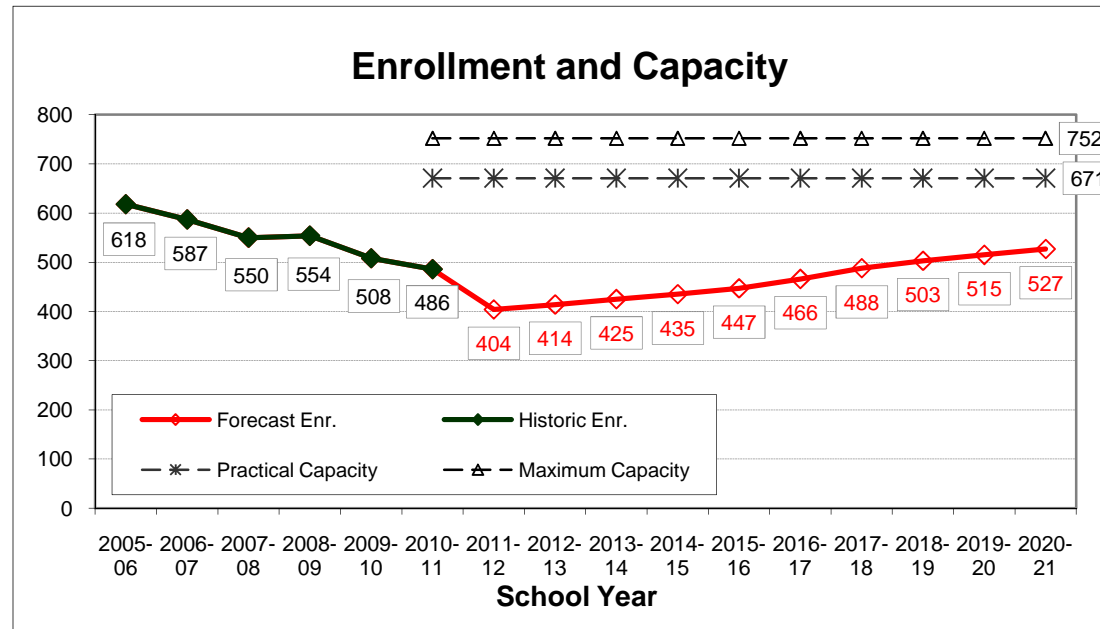
Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Sojourner School



	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	179	182	155	155	155	155	155	155	155	155	155	155
Five Year Change	3		-27					0				

Spring Mountain Elementary School

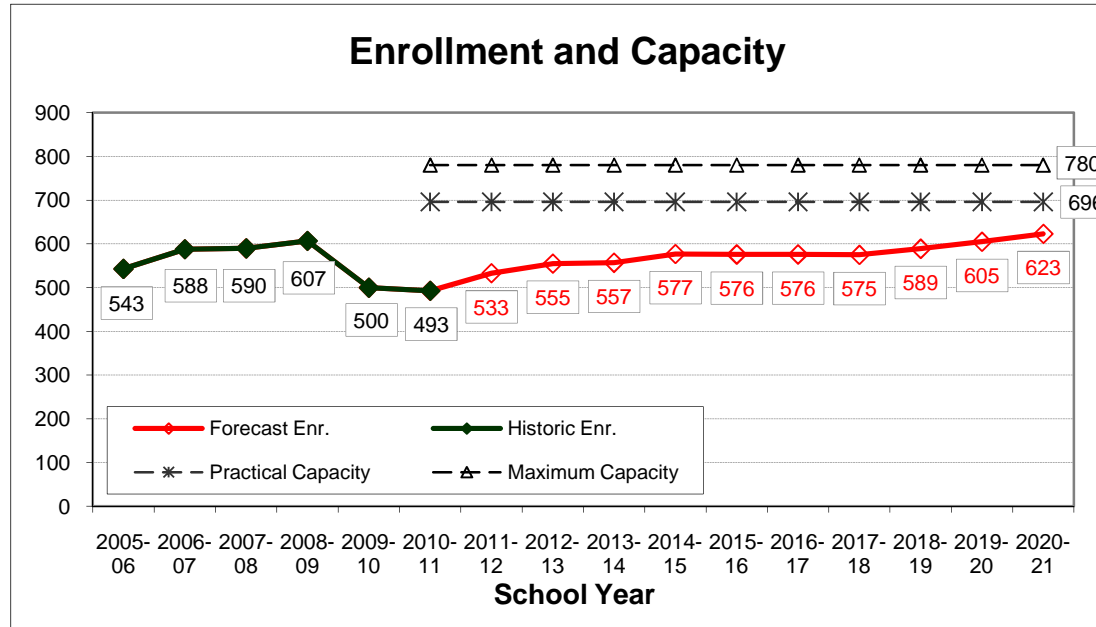


Note: A boundary change in 2009 resulted in a portion of the attendance area being reassigned to Oregon Trail Elementary.

	Enrollment History and Forecast												
	History		Forecast										
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Total enrollment	618	486	404	414	425	435	447	466	488	503	515	527	
Five Year Change	-132							-39					80

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Sunnyside Elementary School

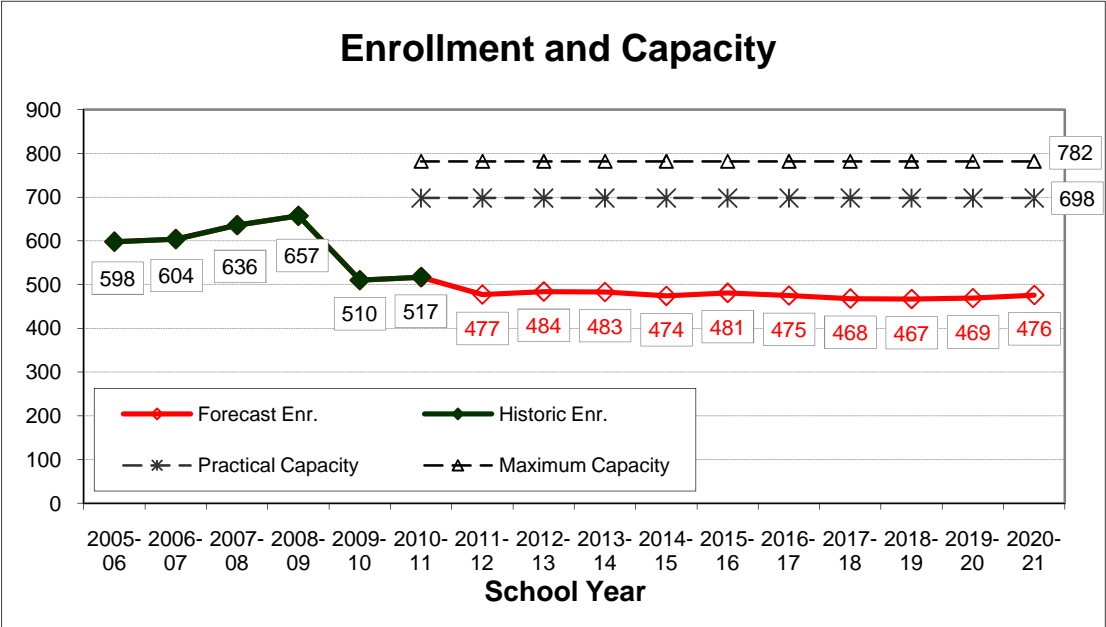


Note: A boundary change in 2009 resulted in a portion of the attendance area being reassigned to Oregon Trail Elementary. Clackamas Elementary closed in 2011 and a portion of its attendance area was reassigned to Sunnyside.

Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	543	493	533	555	557	577	576	576	575	589	605	623
Five Year Change		-50					83					47

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

Whitcomb Elementary School

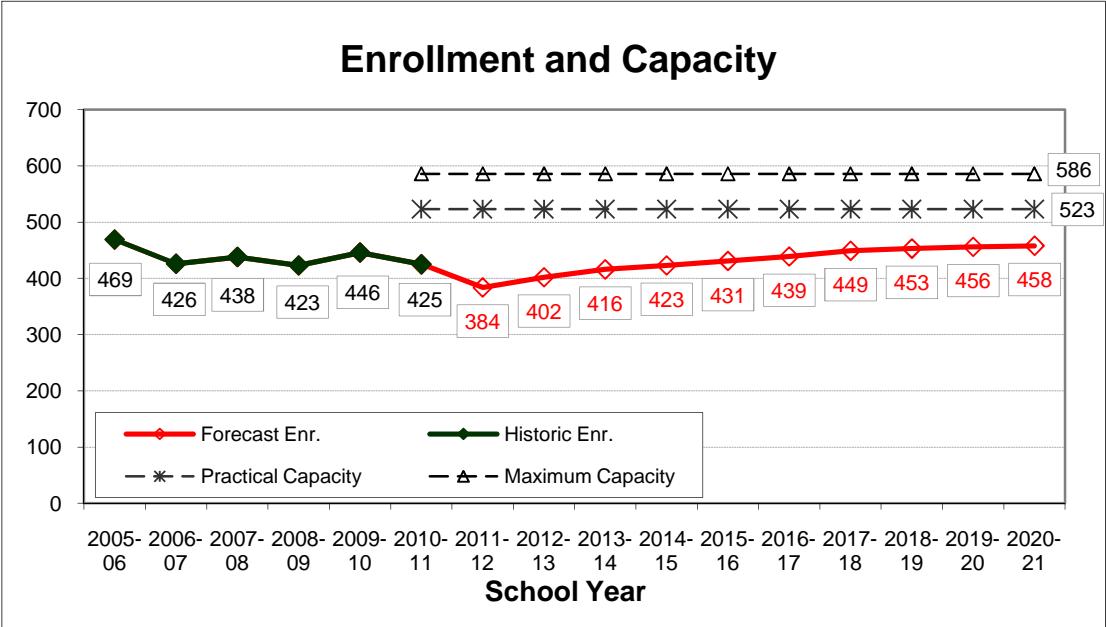


Note: Boundary changes in 2009 resulted in portions of the attendance area being reassigned to Lewelling and Linwood Elementaries.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	598	517	477	484	483	474	481	475	468	467	469	476
Five Year Change	-81		-36					-5				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

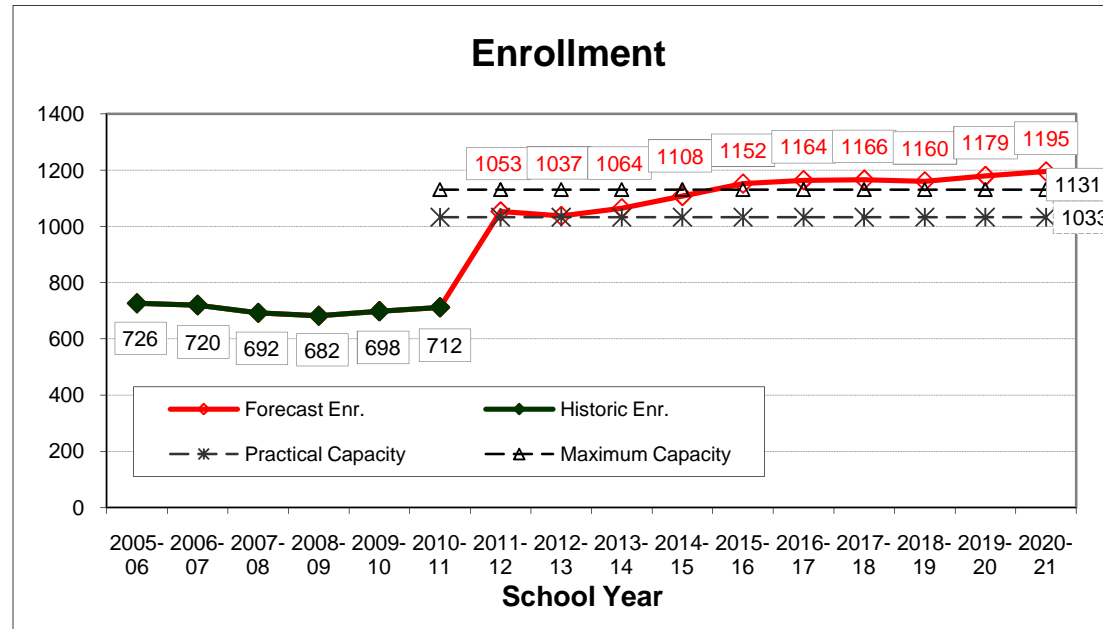
View Acres Elementary School



	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	469	425	384	402	416	423	431	439	449	453	456	458
Five Year Change	-44		6					27				

Note: Elementary schools formerly included 6th grade, but will be reconfigured to grades K-5 in 2011-12.

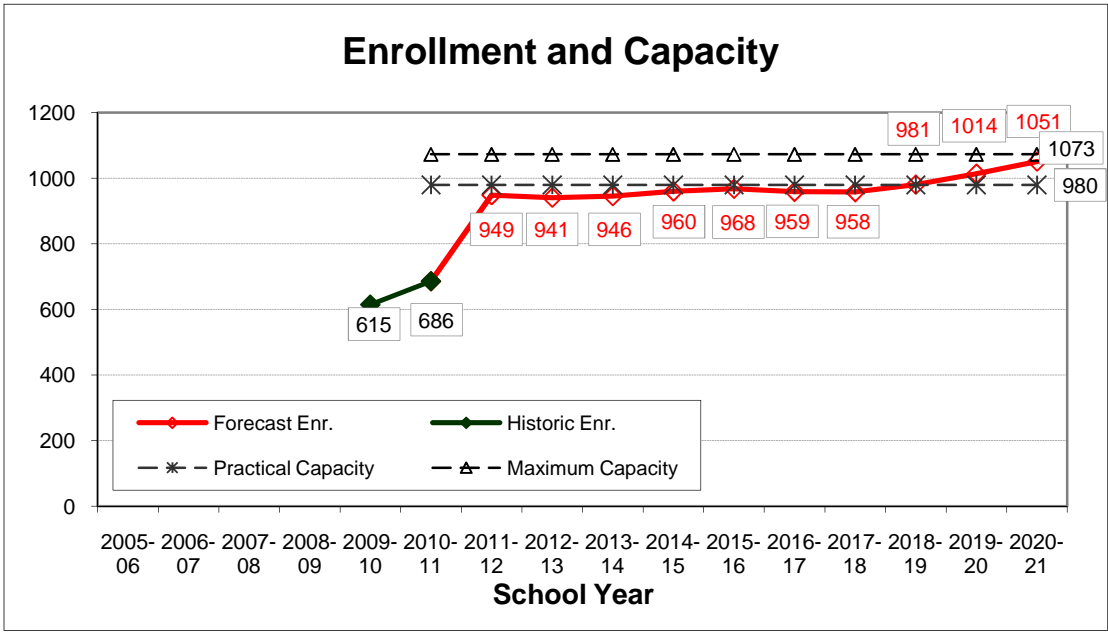
Alder Creek Middle School



Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	726	712	1053	1037	1064	1108	1152	1164	1166	1160	1179	1195
Five Year Change		-14					440					43

Note: Middle schools, formerly grades 7-8 only, will be reconfigured to include 6th grade in 2011-12.

Happy Valley Middle School

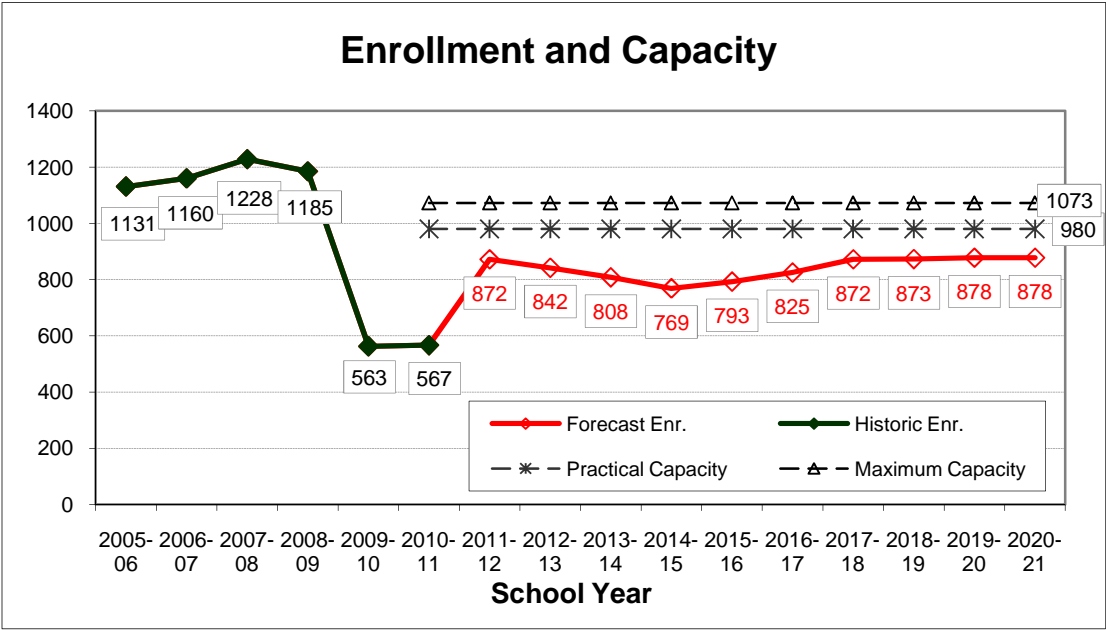


Note: Happy Valley Middle School opened in 2009. A large portion of the Sunrise Middle School attendance area was reassigned to Happy Valley.

	Enrollment History and Forecast											
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	0	686	949	941	946	960	968	959	958	981	1014	1051
Five Year Change	686		282					83				

Note: Middle schools, formerly grades 7-8 only, will be reconfigured to include 6th grade in 2011-12.

Rock Creek Middle School

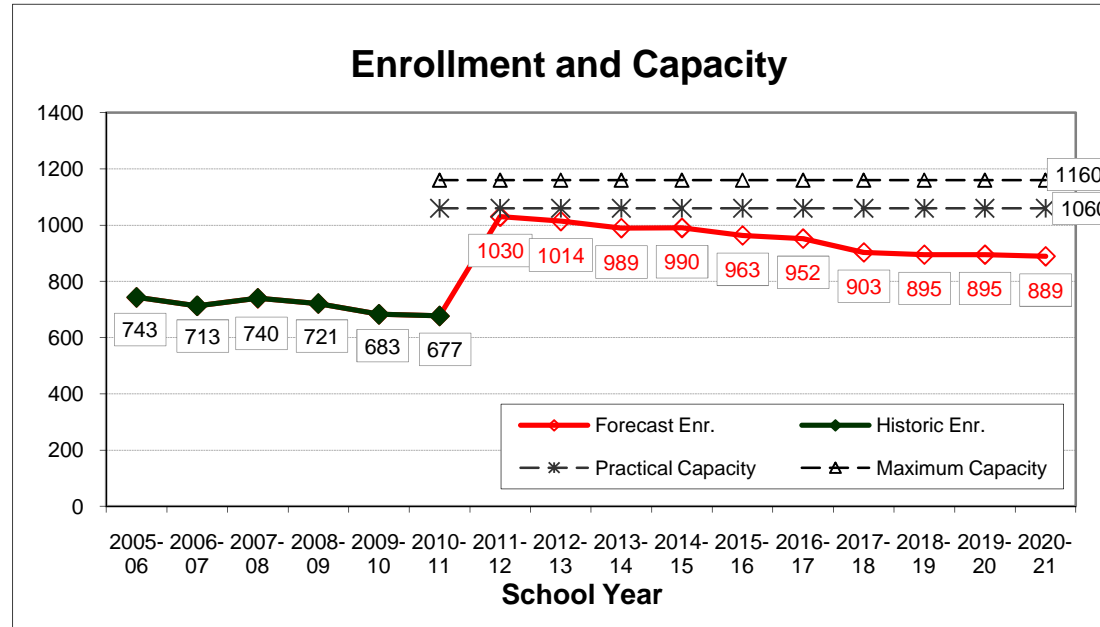


Note: Historic enrollment figures are for Sunrise Middle School. A boundary change in 2009 resulted in a large portion of the attendance area being reassigned to Happy Valley Middle School. Rock Creek opens in 2010.

Enrollment History and Forecast											
History			Forecast								
2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	1131	567	872	842	808	769	793	825	872	873	878
Five Year Change	-564					226					85

Note: Middle schools, formerly grades 7-8 only, will be reconfigured to include 6th grade in 2011-12.

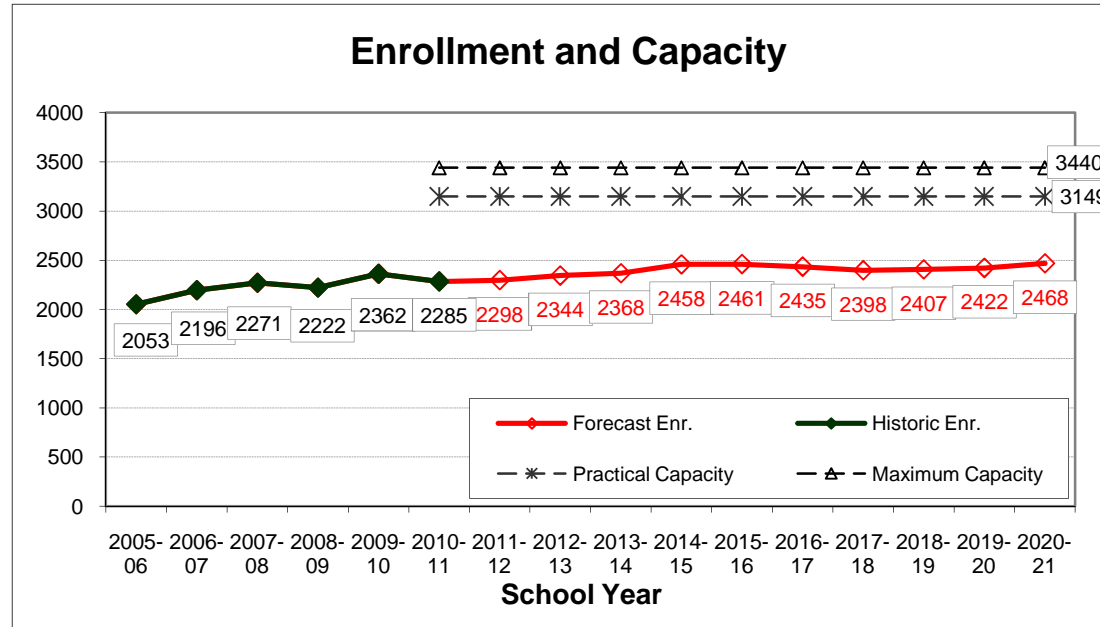
Rowe Middle School



Enrollment History and Forecast											
History		Forecast									
2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	743	677	1030	1014	989	990	963	952	903	895	889
Five Year Change	-66	286					-74				

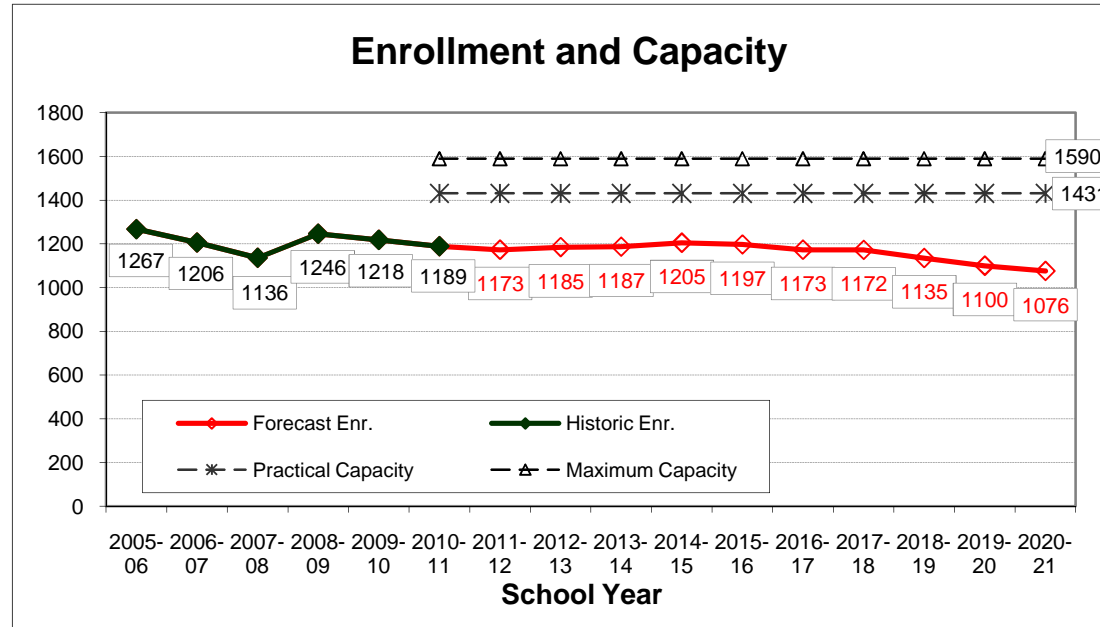
Note: Middle schools, formerly grades 7-8 only, will be reconfigured to include 6th grade in 2011-12.

Clackamas High School



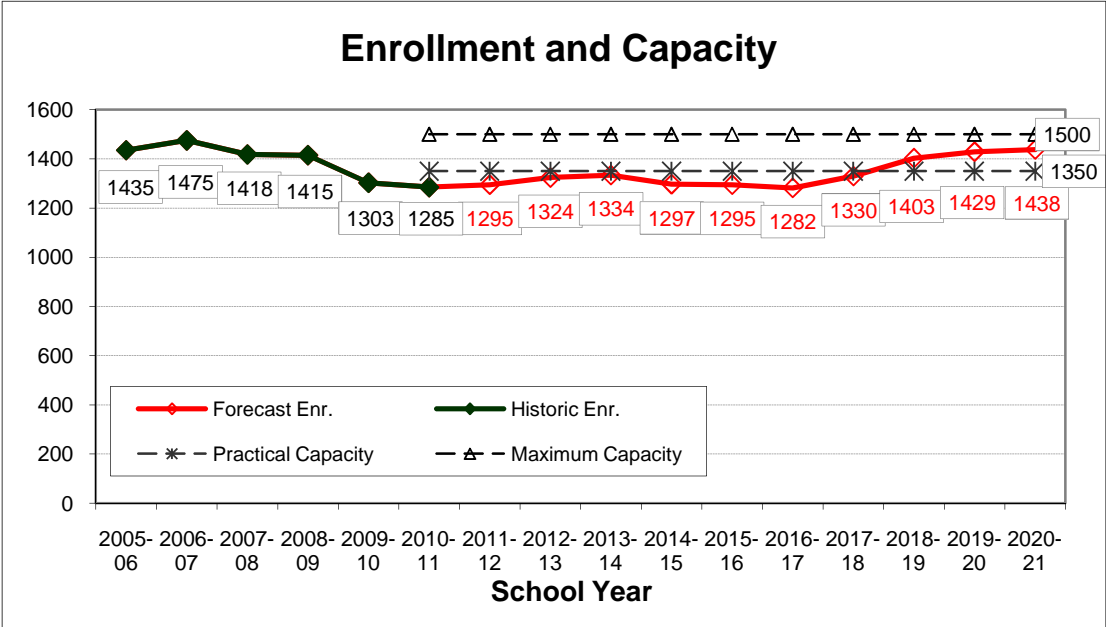
Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	2053	2285	2298	2344	2368	2458	2461	2435	2398	2407	2422	2468
Five Year Change	232		176					7				

Milwaukie High School



Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	1267	1189	1173	1185	1187	1205	1197	1173	1172	1135	1100	1076
Five Year Change	-78		8					-121				

Rex Putnam High School



Enrollment History and Forecast												
	History		Forecast									
	2005-06	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total enrollment	1435	1285	1295	1324	1334	1297	1295	1282	1330	1403	1429	1438
Five Year Change	-150		10					143				

APPENDIX B

2000 AND 2010 CENSUS SUMMARIES

DISTRICT-WIDE AND HIGH SCHOOL ATTENDANCE AREAS

2000 and 2010 Census Summary

North Clackamas School District

Area approximation based on census block geography

POPULATION BY AGE GROUP	2000		2010		2000 to 2010 Change	
Total population	98,149	100.0%	113,071	100.0%	14,922	15.2%
Under age 18	23,918	24.4%	26,290	23.3%	2,372	9.9%
Age 18 and over	74,231	75.6%	86,781	76.7%	12,550	16.9%

AREA AND DENSITY

Land Area - Sq. Mi. (Source: 2010 Census)	40.1	40.1	0.0	0.0%
Persons per square mile	2,447.7	2,819.9	371.8	15.2%

HOUSING OCCUPANCY STATUS

Total housing units	41,117	100.0%	47,246	100.0%	6,129	14.9%
Occupied	38,996	94.8%	44,546	94.3%	5,550	14.2%
Vacant or Seasonal	2,121	5.2%	2,700	5.7%	579	27.3%

HISPANIC OR LATINO AND RACE¹

Total population	98,149	100.0%	113,071	100.0%	14,922	15.2%
Hispanic or Latino (of any race)	5,397	5.5%	10,254	9.1%	4,857	90.0%
Not Hispanic or Latino	92,752	94.5%	102,817	90.9%	10,065	10.9%
White Alone	84,452	86.0%	89,557	79.2%	5,105	6.0%
Black or African American Alone	1,033	1.1%	1,493	1.3%	460	44.5%
American Indian and Alaska Native Alone	625	0.6%	728	0.6%	103	16.5%
Asian Alone	3,892	4.0%	7,288	6.4%	3,396	87.3%
Native Hawaiian and Other Pacific Islander Alone	232	0.2%	347	0.3%	115	49.6%
Some Other Race Alone	91	0.1%	145	0.1%	54	59.3%
Two or More Races	2,427	2.5%	3,259	2.9%	832	34.3%

RACE ALONE OR IN COMBINATION²

Total population	98,149	100.0%	113,071	100.0%	14,922	15.2%
White	89,310	91.0%	98,410	87.0%	9,100	10.2%
Black or African American	1,681	1.7%	2,607	2.3%	926	55.1%
American Indian and Alaska Native	1,613	1.6%	2,313	2.0%	700	43.4%
Asian	4,886	5.0%	8,989	7.9%	4,103	84.0%
Native Hawaiian and Other Pacific Islander	564	0.6%	749	0.7%	185	32.8%
Some Other Race	3,336	3.4%	4,682	4.1%	1,346	40.3%

1. Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

2. Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1.

Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

2000 and 2010 Census Summary

Clackamas H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	2000		2010		2000 to 2010 Change	
Total population	29,866	100.0%	42,809	100.0%	12,943	43.3%
Under age 18	8,178	27.4%	11,401	26.6%	3,223	39.4%
Age 18 and over	21,688	72.6%	31,408	73.4%	9,720	44.8%

AREA AND DENSITY

Land Area - Sq. Mi. (Source: 2010 Census)	22.7		22.7		0.0	0.0%
Persons per square mile	1,315.0		1,884.9		567.2	43.3%

HOUSING OCCUPANCY STATUS

Total housing units	11,385	100.0%	16,211	100.0%	4,826	42.4%
Occupied	10,828	95.1%	15,292	94.3%	4,464	41.2%
Vacant or Seasonal	557	4.9%	919	5.7%	362	65.0%

HISPANIC OR LATINO AND RACE¹

Total population	29,866	100.0%	42,809	100.0%	12,943	43.3%
Hispanic or Latino (of any race)	1,045	3.5%	2,615	6.1%	1,570	150.2%
Not Hispanic or Latino	28,821	96.5%	40,194	93.9%	11,373	39.5%
White Alone	25,156	84.2%	32,470	75.8%	7,314	29.1%
Black or African American Alone	336	1.1%	558	1.3%	222	66.1%
American Indian and Alaska Native Alone	122	0.4%	193	0.5%	71	58.2%
Asian Alone	2,332	7.8%	5,487	12.8%	3,155	135.3%
Native Hawaiian and Other Pacific Islander Alone	85	0.3%	135	0.3%	50	58.8%
Some Other Race Alone	33	0.1%	50	0.1%	17	51.5%
Two or More Races	757	2.5%	1,301	3.0%	544	71.9%

RACE ALONE OR IN COMBINATION²

Total population	29,866	100.0%	42,809	100.0%	12,943	43.3%
White	26,411	88.4%	35,339	82.6%	8,928	33.8%
Black or African American	533	1.8%	945	2.2%	412	77.3%
American Indian and Alaska Native	382	1.3%	574	1.3%	192	50.3%
Asian	2,749	9.2%	6,350	14.8%	3,601	131.0%
Native Hawaiian and Other Pacific Islander	197	0.7%	295	0.7%	98	49.7%
Some Other Race	594	2.0%	1,072	2.5%	478	80.5%

1. Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

2. Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1.

Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

2000 and 2010 Census Summary

Milwaukie H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	2000		2010		2000 to 2010 Change	
Total population	35,118	100.0%	35,302	100.0%	184	0.5%
Under age 18	8,329	23.7%	7,699	21.8%	-630	-7.6%
Age 18 and over	26,789	76.3%	27,603	78.2%	814	3.0%

AREA AND DENSITY

Land Area - Sq. Mi. (Source: 2010 Census)	8.8	8.8	0.0	0.0%
Persons per square mile	3,979.6	4,000.4	21.0	0.5%

HOUSING OCCUPANCY STATUS

Total housing units	15,345	100.0%	15,779	100.0%	434	2.8%
Occupied	14,570	94.9%	14,800	93.8%	230	1.6%
Vacant or Seasonal	775	5.1%	979	6.2%	204	26.3%

HISPANIC OR LATINO AND RACE¹

Total population	35,118	100.0%	35,302	100.0%	184	0.5%
Hispanic or Latino (of any race)	2,570	7.3%	4,462	12.6%	1,892	73.6%
Not Hispanic or Latino	32,548	92.7%	30,840	87.4%	-1,708	-5.2%
White Alone	29,761	84.7%	27,688	78.4%	-2,073	-7.0%
Black or African American Alone	465	1.3%	582	1.6%	117	25.2%
American Indian and Alaska Native Alone	291	0.8%	290	0.8%	-1	-0.3%
Asian Alone	974	2.8%	1,014	2.9%	40	4.1%
Native Hawaiian and Other Pacific Islander Alone	105	0.3%	149	0.4%	44	41.9%
Some Other Race Alone	38	0.1%	53	0.2%	15	39.5%
Two or More Races	914	2.6%	1,064	3.0%	150	16.4%

RACE ALONE OR IN COMBINATION²

Total population	35,118	100.0%	35,302	100.0%	184	0.5%
White	31,706	90.3%	30,962	87.7%	-744	-2.3%
Black or African American	725	2.1%	996	2.8%	271	37.4%
American Indian and Alaska Native	708	2.0%	970	2.7%	262	37.0%
Asian	1,291	3.7%	1,462	4.1%	171	13.2%
Native Hawaiian and Other Pacific Islander	223	0.6%	288	0.8%	65	29.1%
Some Other Race	1,709	4.9%	2,244	6.4%	535	31.3%

1. Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

2. Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1.

Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc

2000 and 2010 Census Summary

Putnam H.S. 2011-12 Attendance Area

Area approximation based on census block geography

POPULATION BY AGE GROUP	2000		2010		2000 to 2010 Change	
Total population	33,165	100.0%	34,960	100.0%	1,795	5.4%
Under age 18	7,411	22.3%	7,190	20.6%	-221	-3.0%
Age 18 and over	25,754	77.7%	27,770	79.4%	2,016	7.8%

AREA AND DENSITY

Land Area - Sq. Mi. (Source: 2010 Census)	8.6		8.6		0.0	0.0%
Persons per square mile	3,873.7		4,083.4		209.3	5.4%

HOUSING OCCUPANCY STATUS

Total housing units	14,387	100.0%	15,256	100.0%	869	6.0%
Occupied	13,598	94.5%	14,454	94.7%	856	6.3%
Vacant or Seasonal	789	5.5%	802	5.3%	13	1.6%

HISPANIC OR LATINO AND RACE¹

Total population	33,165	100.0%	34,960	100.0%	1,795	5.4%
Hispanic or Latino (of any race)	1,782	5.4%	3,177	9.1%	1,395	78.3%
Not Hispanic or Latino	31,383	94.6%	31,783	90.9%	400	1.3%
White Alone	29,535	89.1%	29,399	84.1%	-136	-0.5%
Black or African American Alone	232	0.7%	353	1.0%	121	52.2%
American Indian and Alaska Native Alone	212	0.6%	245	0.7%	33	15.6%
Asian Alone	586	1.8%	787	2.3%	201	34.3%
Native Hawaiian and Other Pacific Islander Alone	42	0.1%	63	0.2%	21	50.0%
Some Other Race Alone	20	0.1%	42	0.1%	22	110.0%
Two or More Races	756	2.3%	894	2.6%	138	18.3%

RACE ALONE OR IN COMBINATION²

Total population	33,165	100.0%	34,960	100.0%	1,795	5.4%
White	31,193	94.1%	32,109	91.8%	916	2.9%
Black or African American	423	1.3%	666	1.9%	243	57.4%
American Indian and Alaska Native	523	1.6%	769	2.2%	246	47.0%
Asian	846	2.6%	1,177	3.4%	331	39.1%
Native Hawaiian and Other Pacific Islander	144	0.4%	166	0.5%	22	15.3%
Some Other Race	1,033	3.1%	1,366	3.9%	333	32.2%

1. Data are shown for the Hispanic or Latino population, as well as for people who reported one race and for people who reported two or more races. The population of One Race is the total of the population in the 6 categories of one race. The population of Two or More Races is the total of the population in the 57 specific combinations of two or more races. The redistricting files include data for all 63 groups.

2. Data are shown for the 6 race alone or in combination categories. The concept "race alone or in combination" includes people who reported a single race alone (e.g., Asian) and people who reported that race in combination with one or more of the other major race groups (i.e., White, Black or African American, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race). The concept "race alone or in combination," therefore, represents the maximum number of people who reported as that major race group, either alone, or in combination with another race(s). The sum of the 6 individual race "alone or in combination" categories may add to more than the total population because people who reported more than one race were tallied in each race category.

Sources: U.S. Census Bureau, 2010 Census, Public Law 94-171 Summary File; 2000 Census, SF1.

Tabulated by Population Research Center, Portland State University.

www.pdx.edu/prc